ED 463 612                                                              EC 308 908

AUTHOR          Walford, Sylvia B.; Thomas, Portia R.
TITLE           Consumer Mathematics. Teacher's Guide [and Student Guide].
                Parallel Alternative Strategies for Students (PASS).
INSTITUTION     Leon County Schools, Tallahassee, FL. Exceptional Student
                Education.; Florida State Dept. of Education, Tallahassee.
                Bureau of Instructional Support and Community Services.
REPORT NO       ESE-8849.A; ESE-8849.B
PUB DATE        1999-00-00
NOTE            384p.; Course no. 1205370. Teacher's guide reprint 1999,
                originally published in 1995. Student guide reprint 2001,
                originally published in 1995. Part of the Curriculum
                Improvement Project funded under the Individuals with
                Disabilities Education Act (IDEA), Part B.
AVAILABLE FROM  Florida State Dept. of Education, Div. of Public Schools and
                Community Education, Bureau of Instructional Support and
                Community Services, Turlington Bldg., Room 628, 325 West
                Gaines St., Tallahassee, FL 32399-0400 (Teacher's guide,
                $3.30; Student guide, $8.05). Tel: 850-487-0186; Tel:
                800-487-0186 (Toll Free); Fax: 850-487-2679; e-mail:
                cicbisca@mail.doe.state.fl.us; Web site:
                http://www.leon.k12.fl.us/public/pass.
PUB TYPE        Guides - Classroom - Learner (051) -- Guides - Classroom -
                Teacher (052)
EDRS PRICE      MF01/PC16 Plus Postage.
DESCRIPTORS     Academic Accommodations (Disabilities); Academic Standards;
                *Consumer Education; Curriculum; *Daily Living Skills;
                *Disabilities; Economics Education; Inclusive Schools;
                Instructional Materials; Insurance; Mathematics Instruction;
                *Money Management; Purchasing; Retirement; Secondary
                Education; *Secondary School Mathematics; State Curriculum
                Guides; Teaching Guides; *Teaching Methods; Textbooks
IDENTIFIERS     *Florida

ABSTRACT
        This teacher's guide and student guide are designed to
accompany a consumer mathematics textbook that contains supplemental
readings, activities, and methods adapted for secondary students who have
disabilities and other students with diverse learning needs. The materials
are designed to help these students succeed in regular education content
courses and include simplified text and smaller units of study. The
curriculum correlates to Florida's Sunshine State Standards and is divided
into the following 9 units of study: (1) budgeting your income; (2) banking
and checking; (3) buying and selling; (4) borrowing and lending; (5)
purchasing a car and car insurance; (6) paying your taxes; (7) choosing a
place to live, deciding whether to rent or buy, playing real estate taxes,
and home insurance; (8) investing your money and stocks and bonds; and (9)
planning for retirement. For each unit, the teachers' guide includes a
general description of the unit's content and the unit's focus, provides
suggestions for instructional activities, and contains an assessment to
measure student performance. Appendices in the teacher's guide contain a
chart describing standards and benchmarks. The student guide contains

vocabulary lists, explanation of content, and practice exercises designed to evaluate comprehension. (Contains 25 references.) (CR)

# Consumer Mathematics.

## Teacher's Guide [and Student Guide].

## Parallel Alternative Strategies for Students (PASS).

Sylvia B. Walford and Portia R. Thomas

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# Teacher's Guide

# Consumer Mathematics

Course No. 1205370

1995

Florida Department of
Education

www.firn.edu/doe

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# Consumer Mathematics

## Teacher's Guide

# Consumer Mathematics

## Teacher's Guide

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# Acknowledgements

This *Parallel Alternative Strategies for Students (PASS)* volume *Consumer Mathematics*, was started originally by Broward County exceptional educators. From this early draft materials, several Leon County teachers have worked together to shape the content and design, as well as review this text for appropriateness and usability.

# Foreword

*Parallel Alternative Strategies for Students (PASS)* books are content-centered packages of alternative materials and activities designed to assist secondary teachers to meet the needs of students of various achievement levels in the basic education content courses. Each *PASS* offers teachers supplementary activities and strategies to assist certain exceptional students and low-achieving students in the attainment of the intended outcomes of a specific course.

The alternative methods and activities found in the *PASS* materials have been adapted to meet the needs of students who have mild disabilities and are mainstreamed in content classes. The *PASS* materials provide basic education teachers with a modified approach for presenting the course content that may be useful with these students and other students who have learning or behavior problems. The *PASS* materials also provide the exceptional education teacher who is teaching subject area courses with curriculum materials designed for these exceptional education students.

Students with learning or behavior problems often require alternative methods of presentation and evaluation of important content. The content in *PASS* differs from the standard textbooks and workbooks in several ways: simplified text; smaller units of study; reduced vocabulary level; increased frequency of drill and practice; shorter reading assignments; clearer and more concise directions; less cluttered format; and the presentation of skills in small, sequential steps.

As material to augment the curriculum for exceptional students and other low-achieving students, *PASS* may be used in a variety of ways. For example, some infusion strategies for incorporating this text into the existing program are as follows:

- additional resource to the basic text
- pre-teaching tool (advance organizer)
- post-teaching tool (review)
- alternative homework assignment
- alternate to a book report
- extra credit
- make-up work
- outside assignment
- individual contract
- self-help modules
- independent activity for drill and practice
- general resource material for small or large groups
- assessment of student learning.

The initial work on *PASS* materials was done in Florida through Project IMPRESS, an Education of the Handicapped Act (EHA), Part B, project funded to Leon County Schools from 1981–1984. Four sets of modified content materials called *Parallel Alternate Curriculum* (*PAC*) were disseminated as parts two through five of *A Resource Manual for the Development and Evaluation of Special Programs for Exceptional Students, Volume V-F: An Interactive Model Program for Exceptional Secondary Students* (IMPRESS). Project IMPRESS patterned the *PACs* after the curriculum materials developed at the Child Service Demonstration Center at Arizona State University in cooperation with Mesa, Arizona Public Schools.

A series of nineteen *PASS* volumes was developed by teams of regular and special educators from Florida school districts who volunteered to participate in the EHA, Part B, Special Project, Improvement of Secondary Curriculum for Exceptional Students. This project was funded by the Florida Department of Education, Bureau of Education for Exceptional Students, to Leon County Schools during the 1984 through 1988 school years. Basic education subject area teachers and exceptional education teachers worked cooperatively to write, pilot, review, and validate the curriculum packages developed for the selected courses.

Continuation efforts have been maintained through the Curriculum Improvement Project. Beginning in 1989, the Curriculum Improvement Project contracted with Evaluation Systems Design, Inc. to design a revision process for the nineteen *PASS* volumes. First, a statewide survey was disseminated to teachers and administrators in the sixty-seven school districts to assess the use of and satisfaction with the *PASS* volumes. Teams of experts in instructional design and teachers in the content area and in exceptional education then carefully reviewed and revised each *PASS* volume according to the instructional design principles recommended in the recent research literature.

Neither the content nor the activities are intended to be a comprehensive presentation of any course. These *PASS* materials, designed to supplement textbooks and other instructional materials, should *not* be used alone. Instead, they should serve as a stimulus for the teacher to design alternative strategies for teaching the student performance standards to the mastery level to the diverse population in a high school class.

*PASS* provides some of the print modifications necessary for students with special needs to have successful classroom experiences. To increase student learning, these materials must be supplemented with additional resources that offer visual and auditory stimuli, including computer software, videotapes, audiotapes, and laser videodiscs.

# User's Guide

The *Consumer Mathematics PASS* is designed as a combination supplementary text and workbook for course number 1205370. This *PASS* is divided into nine units of study. An alphabetized list of important terms, entitled Vocabulary, is provided at the beginning of each unit. This list is divided into sections that correspond to the sections within the unit. The vocabulary terms may be presented concurrent with the introduction of the concepts for each section of the unit and the list used for ready reference and review. For emphasis and quick recognition, each vocabulary term appears in boldfaced type the first time it is used in the content.

Each section of text features the characters Gërta, Juan, or Stefan in situations to illustrate the application of the specific skills addressed. Following the reading of the story about the characters, initial skill practice is presented in a problem-question called *You Try*. The framework for the solution to the problem is given for the students to complete. The model provides a partial solution, giving clues for the students' initial attempt. Practice pages follow the You Trys at the end of each section and provide opportunities for practice and reinforcement of the section's skills. Practice pages give the formulas for solving the problems in that activity. The number of the student performance standard(s) addressed also appears at the top of each practice page. Student materials may be reproduced for classroom use.

Icons and graphics have been used extensively to assist the students. These visual cues are motivational and create interest while promoting learning. Consistent formatting and easy-to-follow directions build student confidence and insure success.

This separate Teacher's Guide contains an introduction for the course materials, ideas for presenting instruction, unit Quizzes, and answer keys for all practice activities as well as for the You Trys in each unit.

This *PASS* has been correlated to the intended outcomes adopted by the State Board of Education for consumer mathematics course 1205370. (See Appendix A.) All of the intended outcomes for course 1205370 are addressed. All of the student performance standards have been at least partially covered in this text. Other resources must be used to teach standards not adequately covered in this text.

No one text can adequately meet all the needs of all students. This *PASS* is no exception. The reading level will be too high for some students and too low for others. The concepts presented will be too complex for some students and too simple for others. For comprehensive coverage, it is recommended that teachers use *PASS* along with other instructional materials to provide additional reinforcement.

Appendix A contains a correlation chart of the student performance standards and the units in which each is covered. Appendix B is a list of multimedia resources. The sources for ordering these materials are included in Appendix B. The textbooks used as references during the development of this *PASS* book are listed in Appendix C.

The teacher-developed materials contained herein combined with other carefully selected resources and effective teaching strategies provide a good foundation for teaching the consumer mathematics course to exceptional students and other students with learning problems.
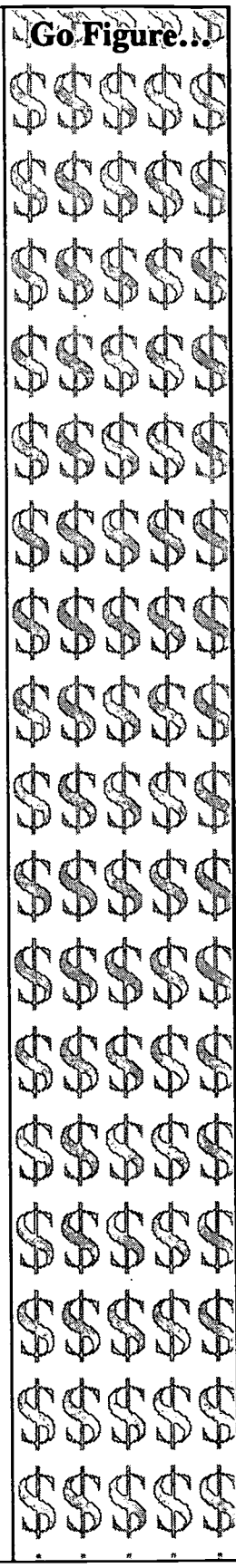
# Consumer Mathematics

## Introduction

Budgeting income, banking and checking, retail buying, borrowing and lending, purchasing a car, paying taxes, acquiring housing, investing, and planning for retirement— from the simple to the complex, all are necessary consumer money management skills for adults. The goal of the consumer mathematics course is to help students to become smart consumers—to use their money wisely. They will explore financial decision-making processes, become aware of the effects of commercial profit on personal finances, develop an understanding of credit, loans, interest rates, taxes, and Social Security, and be introduced to concepts in investments and retirement planning. Learning the basics of money management will encourage students to use their present and future incomes prudently.

Many of the consumer mathematics problems for the skills listed above require complex, multistep mathematical operations; thus, students should be encouraged to use calculators to assist them. Concentrating on the order of the steps rather than the calculations will help reduce error and confusion.

Field experiences such as visits to car dealerships, banks, grocery stores, and shopping malls will provide rich opportunities for gathering pertinent information. High-school students can usually arrange their own transportation and accomplish this outside of school on their own time. Substitute telephone calls when transportation is a hardship.

Inviting guest speakers to come to the classroom can be equally valuable. Local car salesmen, credit union representatives, realtors, bank tellers, financial planners, or insurance agents are often willing to be a resource to the

schools. These professionals view teenagers as consumers or potential consumers and consider them a worthwhile audience.

If your classroom is equipped with a computer and you have access to some of the money-management software, provide the time necessary for the students to explore the possibilities and capabilities of this technology. The students will benefit greatly from the time invested—even gaining employability skills in the process.

The media presents a wealth of information for classroom investigation. The local newspaper with its advertisements, financial section, classified ads, etc. creates opportunities for meaningful explorations. Videotaped segments from current television programs on pertinent financial topics can provide a base for classroom discussion.

Using real-life situations and simulation activities in teaching consumer mathematics will help draw the students into the content and increase their motivation to acquire the skills necessary to effectively manage their financial matters.

## Setting the Stage—the Approach

To develop the deepest understanding of money management, the students need to be immersed in familiar and self-generated occupational personas. The students, in character, will each establish a realistic financial base to guide their decisions as consumers throughout the year. Sharing the decisions of the different personas in class will encourage generalization and carryover of those processes to real-life situations. Using a practical approach will create a meaningful course which is stimulating and enjoyable for all.

At the beginning of the year the students should select an occupation. Each student will obtain complete information about that occupation—training and educational requirements,

starting salary, job availability, specific requirements such as travel, hours per week, schedule, etc. The students will use the same occupation and salary for the entire year for all the consumer mathematics activities.

Use these possible sources of information about various occupations.

school occupational specialist

| | |
|---|---|
| guidance counselor | school media center |
| career guides | library research |
| career shadowing | career fair |

**Preparing for the Job.** Role-playing interviews and personally submitting written products such as resume, references, and applications to the *employer* will bring to life these important employability skills. Students could write acceptance notification letters to each other. Note: All students' are selected as the top applicant for their position.

Along with their career choice, students must decide on their personal/family status. Each will decide his marital status and number of dependents. These will remain constant for the year also. As the year progresses, other life decisions regarding automobiles, insurance, home ownership, investments, etc., will be decided by each student and the information organized for placement in a personal portfolio.

**Personal Portfolio.** Have the students create and compile a personal portfolio. With each unit of study they will add materials, including forms, brochures, and other information to their portfolio. The final collection will contain information, resources, and examples that will be a valuable resource for each student.

Items to place in the portfolio initially may include a job application, resume, references, personal history, and a business letter requesting an interview. A completed W-4 form
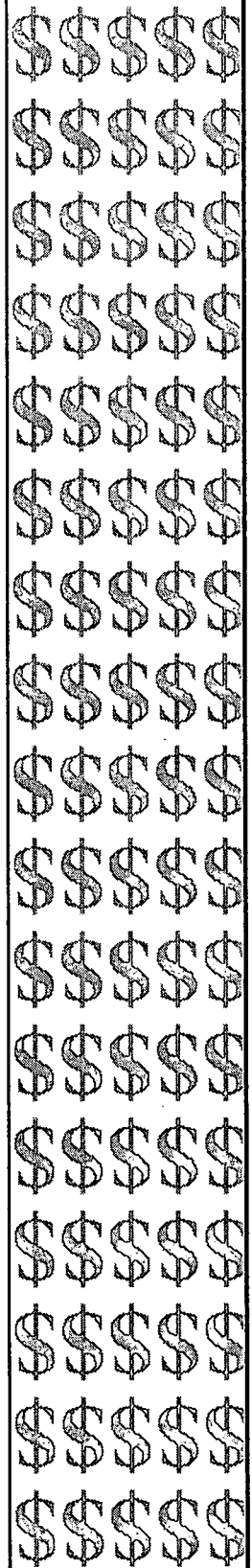
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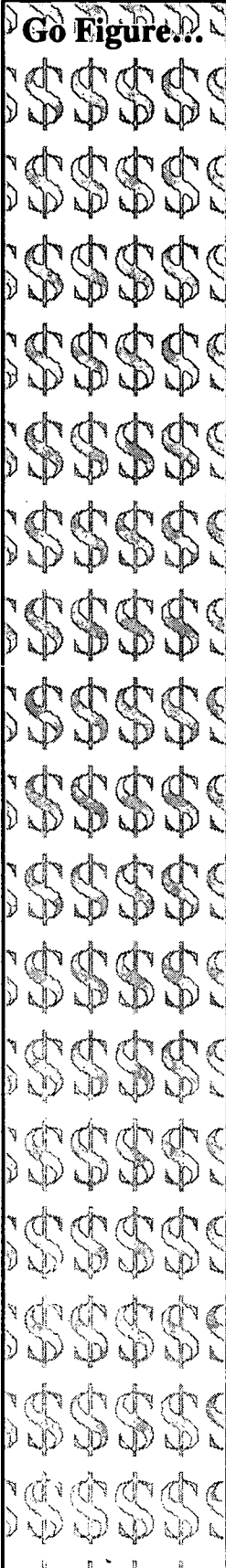
should be included in the portfolio. If the students don't have previous experience in filling out a job application or writing a resume, you may want to include these assignments as you set the stage for the year. If the students have created these in DCT or other classes, allow them to bring them and modify as needed.

The following activities are suggested as ways to teach the consumer mathematics concepts by applying them in the students' simulated career roles. Each unit is listed below with some activities for your consideration. Select those appropriate for your school setting. These will only be the beginning of the creative ways you will find to explore these practical mathematics concepts and make them meaningful to your students.

## Unit 1: Budgeting Your Income

*Have the students...*

√ determine their hourly rate, weekly rate, annual salary, overtime and commission, if applicable. Project average monthly commission.

√ estimate their net income based on their marital status and dependents, benefits, and deductions such as union dues, health insurance, annuities, retirement, savings, and charitable contributions. Receive an individual paycheck prepared by the teacher.

√ record the base information on their budget sheet.

## Unit 2: Banking and Checking

*Have the students...*

√ discuss the differences in the services and fees between financial, or lending, institutions, including banks and credit unions.

# Guide

√ visit and bring back printed information from a lending institution. Students may go in pairs and work in cooperative learning groups.

√ select a financial institution, and list the reasons for their choice. Complete an application to open a checking account and sign the signature card.

√ create their own checkbook, including checks with their own account number, deposit slips, register, and a balance sheet. Design a checkbook cover. Use the account throughout the year, endorsing and depositing their paychecks and paying all their bills.

√ complete extra practice exercises, as necessary, on additional checks, check registers, deposit slips, etc.

## Unit 3: Buying and Selling

*Have the students...*

√ bring in advertisements from the newspapers to show discounts and calculate the cost savings for specified items.

√ do comparison shopping. Bring in at least two different stores' advertisements for the same product.

√ decide on a set of items to do comparison grocery shopping. Assign specific students to certain items and stores. Students bring the price information to class to compile a class graph or comparison chart.

√ discuss advertising techniques that companies use to entice customers into their store.

√ bring examples of coupons, such as buy one, get one free, and other enticements.

√ create posters using cutouts from magazines, newspapers, and catalogs to show comparison shopping.

√ discuss the costs of name-brand clothing and cost savings realized by purchasing other brands.

√ determine the tax cost of items from the various projects above. Ask students to bring in a grocery receipt to see taxable and nontaxable items. Bring in other receipts to see the tax entry and verify the percentage.

√ make a list of the basic furnishings that they think they might need for each room in the place they plan to live.

## Unit 4: Borrowing and Lending

*Have the students...*

√ comparison shop for credit cards. Use mailouts to collect information on interest rates, annual fees, perks, requirements, methods for calculating interest, etc. Choose an issuer of a credit card, and complete an application.

√ discuss gimmicks such as frequent-flyer miles, refunds, rental car rates, discounts, clubs, and other awards.

√ list four different credit cards and compare and contrast the information on costs and benefits.

√ invite a guest from a financial institution to speak to the class.

√ visit a major department store and get information on the purchase of a major appliance financed several different ways. List the advantages and disadvantages of paying by store financing, credit card, a loan from a financial institution, etc. Consider the use of a down payment to reduce the loan and its costs.

√ compare the cost of renting vs. buying or renting to own.

√ consider which methods of purchasing large-ticket items would be the most advantageous for their salary. Examples should include car, furnishings, and appliances.

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## Unit 5: Purchasing a Car

*Have the students...*

√ visit a car dealership and select the car (new or used) that they will purchase. Bring back information from the dealer on cost, down payment, purchase price, cost of financing, etc. If they cannot go and visit a dealership, bring in information from the newspaper. Explore the methods of payment available such as cash, financing through the dealership or through a lending institution. Use a guideline for purchasing a car based on 10% of their income.

√ invite an insurance agent to come to the class to talk to the students.

√ compare costs of automobile insurance. Choose the type of coverage needed, and call three different companies to compare the rates. Select and purchase appropriate car insurance.

√ include in their portfolio all the information compiled on their selected car, cost of purchase, and cost of financing. Use the activity on page 153 in the student book, Fixed and Variable Costs (cost of insurance and operating expenses), and include it in their portfolio for the car of their choice.

√ decide on a car repair—tires, brakes, etc.—get prices and pay for the work with a personal check.

## Unit 6: Paying Your Taxes

*Have the students...*

√ use official U.S. government forms that have been collected from the U.S. Post Office, IRS, or public library. Determine which tax form they want to use given their salary, marital status, and number of dependents.
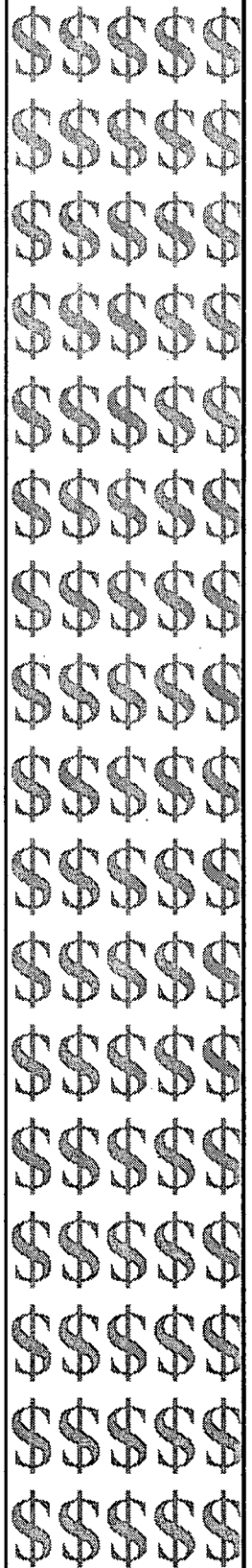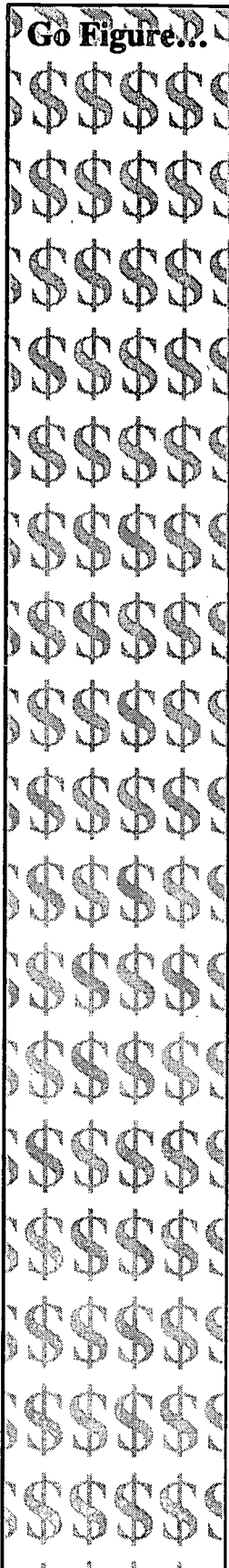
√ complete a W-4 form.

√ assuming that the tax rate is 12%, determine the estimated withholding or federal income tax that would show on their W-2 form. Use this information to complete a 1040A form.

√ place the complete tax information in their portfolio.

## Unit 7: Choosing a Place to Live

*Have the students...*

√ calculate 25% of their net income to determine the amount of money available for housing.

√ use the information and skills in this unit to decide whether they want to rent or buy a place to live. Consider: a) location—shopping, close to work, schools, entertainment, crime rate, etc.; b) size of household; c) length of stay. After class discussion, have students justify their decision, addressing each of the categories in the list below in a written statement. Ask the students to put the chart of information on reasons for housing in their portfolio.

| Rent | Own |
| --- | --- |
| furnished | financing |
| unfurnished | furnishing |
| type/style | insurance |
| lease options | real-estate taxes |
| contractual conditions | maintenance |
| deposits | insurance |

√ prepare a visual display of their house or apartment. Include separate rooms using pictures from home magazines or create their own pictures.

√ bring in classified ads from newspapers, local publications, and real-estate brochures for sources of housing information.

# Guide

√ complete a 1040A (Unit 6) using their home as a deduction.

√ include cost of housing information on their budget form for their portfolio.

## Unit 8: Investing Your Money

*Have the students...*

√ participate in a simulation activity and invest a given amount of money in the stock market. Keep a daily record of the changes in their investment(s). Each person must choose a different stock. After a given number of days or months, determine the results. Prepare a class graph to show the results.

√ contact the Center for Economic Education in your geographic area for games and reference or free instructional materials.

√ invite a financial planner to visit the class. Many have slide presentations and excellent print materials to distribute.

√ use a situation set up for the class such as: You won $5000 in the lottery and you have decided to invest it. How are you going to invest your money? Bonds, stocks, money market, real estate, certificates of deposits, mutual funds, or tax-sheltered annuity? Tell which choices they made and why.

## Unit 9: Planning for Retirement

*Have the students...*

√ interview a retired relative or friend or other retiree. Ask the retirees for suggestions on planning for retirement. Ask them what they did that was

**Go Figure...**

particularly successful and what they would do differently if they could.

√ watch for television specials and articles about retirement experiences, both positive and negative. Report on these to the class for discussion.

√ invite an expert financial planner, investment broker, insurance agent, or other consultant knowledgeable about financing retirement to come to the class.

√ determine the retirement benefits that are available to them in their chosen occupation—public service, military, private enterprise, self-employed, etc. What amount can they project that they will collect monthly? What amount will they collect from Social Security?

## Culminating Activity

*Have the students...*

calculate their total living expenses and determine if they are living within their budget. The students should use their net income and a pie graph, like the one illustrated on the next page, to determine the amount allocated for each category (e.g., food, housing). Do these amounts agree with what they have compiled in their portfolio? If not, what adjustments need to be made? Do the students feel comfortable with the choices they have made?

Consider the costs of cars, food, housing, family, child care, and investments. Will these all fit into their budget? What about savings? Remember to include additional expenses such as car and home repairs, medical, costs of newspapers, magazines, cable, and telephone that need to be budgeted. Prepare the completed budget for the portfolio.

# Guide

## Budgeting Expenditures



- Regular Savings 10%
- Other 4%
- Insurance 5%
- Housing 25%
- Food 24%
- Clothing 8%
- Transportation 17%
- Recreation 7%

**Go Figure...**
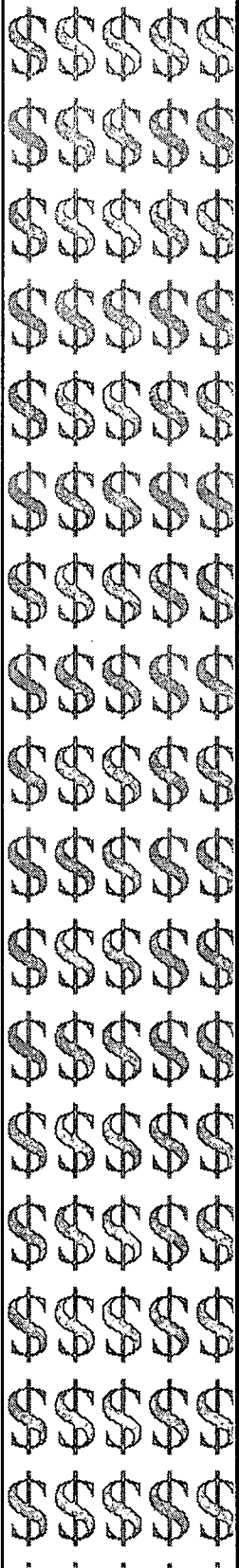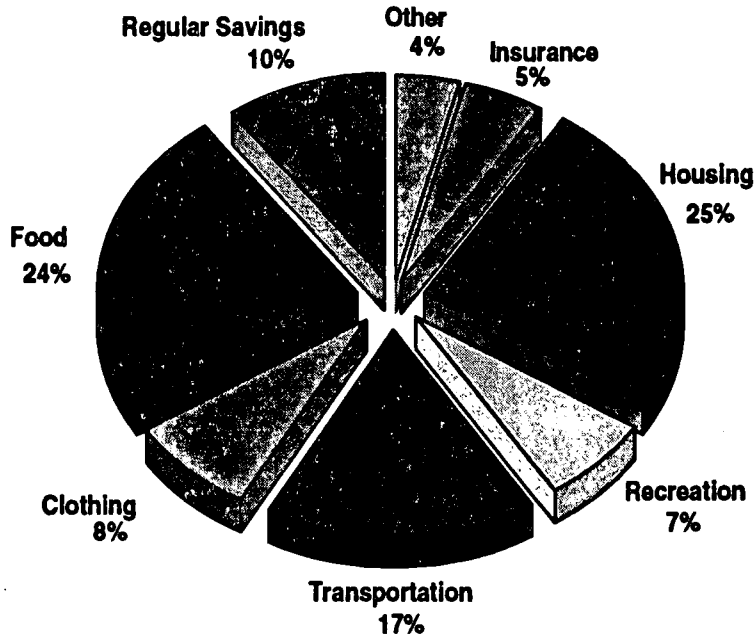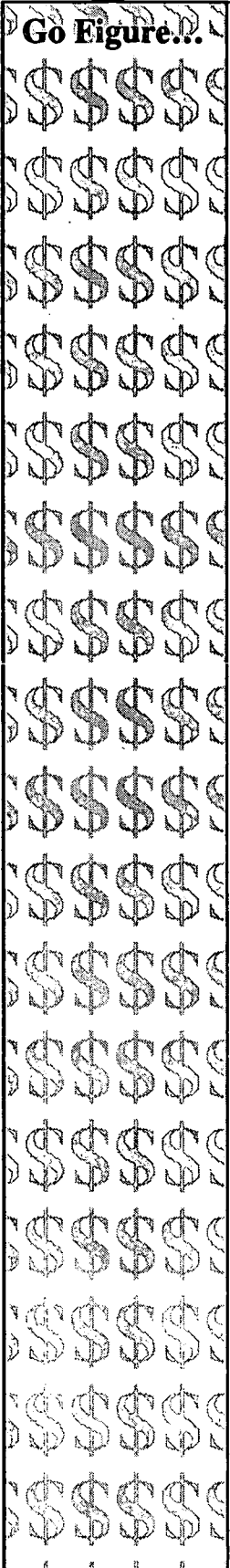
## Consumer Mathematics Intended Outcomes
### Course No: 1205370

| Units | | Intended Outcome |
|---|---|---|
| 1. Budgeting Your Income | 5 | Demonstrate the ability to solve problems involving personal income and budgeting (wages, hourly rates, deductions, benefits, etc.). |
| 2. Banking and Checking | 3 | Demonstrate the ability to solve problems involving checking accounts, savings accounts, and loans. |
| 3. Buying and Selling | 1 | Demonstrate the ability to use rational numbers to solve problems involving purchasing goods and services. |
| | 6 | Demonstrate the ability to solve problems involving different kinds of taxes. |
| 4. Borrowing and Lending | 2 | Demonstrate the ability to solve problems involving the cost of credit, installment buying, and borrowing money. |
| | 3 | Demonstrate the ability to solve problems involving checking accounts, savings accounts, and loans. |
| 5. Purchasing a Car | 8 | Demonstrate the ability to solve problems involving buying, owning, and operating an automobile. |
| 6. Paying Your Taxes | 7 | Demonstrate the ability to complete an income tax form. |
| 7. Choosing a Place to Live | 9 | Demonstrate the ability to solve problems involving owning and maintaining a home. |
| 8. Investing Your Money | 4 | Demonstrate the ability to solve problems involving different types of investments (stocks, bonds, money market, real estate, etc.). |
| 9. Planning for Retirement | 10 | Demonstrate the ability to solve problems involving provisions for retirement (investments, insurance, Social Security, etc.). |

5.0

# Quiz

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

1. Kelly worked 48 hours last week. Her regular rate is $5.70 per hour. She is paid time-and-a-half for overtime. Find her (a) regular wages, (b) overtime wages, and (c) total wages.

   (a) _____

   (b) _____

   (c) _____

2. Sandy delivers newspapers in her neighborhood. She is paid 7.5¢ per paper. She delivers 78 papers a day. How much will she earn in 5 days?

   _____

3. Mike earns 7% commission on all sales plus a salary of $125 a week. He had sales of $2500 last week. What were his total earnings?

   _____

4. Using the income tax table and 7.65% for FICA tax, find John's net income for last week. He earned $268.50 last week and also had deductions for health insurance of $45 and union dues of $15. John is single and has 0 exemptions.

   _____

5. Kali has earned $76,890.00 this year. If her gross income in the 16<sup>th</sup> week is $675.00, what is her FICA tax?

   _____

5.0

6.  Nelson is single and is paid weekly. He has three dependents and earned $268.50 this week. What is his federal income tax for this pay period?

    _____

7.  Find Reagan's net pay if she earned $345.00 and had $46.89 in deductions?

    _____

8.  Rob's expenses for the month are: rent—$350; utilities—$150; food—$225; car payment—$240; and miscellaneous expenses—$250. His net income per month is $1850. Use the chart below to find how much money Rob will have left after his expenses are paid.

| Budget | |
|---|---|
| Income | $ |
| Expenses | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Total Expenses | $ |
| Balance | $ |

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# Budgeting Your Income

**You Try (p. 7)**

    expenses: $75.67
1. Answers will vary.
2. Answers will vary.

**p. 9**

    balance: $335

**You Try (p. 11)**

    weekly salary: $320
    annual salary: $16,640
    monthly salary: $1386.67

1. $720; $37,440; $3120
2. $400; $20,800; $1733.33

**You Try (p. 13)**

    hourly wage: $320
    piece-rate: $400
    commission: $382.50
    highest wages: piece-rate

**pp. 14-15**

1. $160
2. $247
3. $95
4. $6.75
5. $5.70
6. $7.50; $45
7. $205
8. $260; $68.25; $328.25
9. $202
10. $285; $56.25; $341.25

**pp. 16-17**

1. $73
2. $329
3. $85
4. $250
5. $74
6. $50.19
7. $89.25
8. $264.06

**p. 18**

1. $800
2. $490
3. $2890
4. $1440
5. $862.50

**You Try (p. 21)**

    FICA: $30.60
1. $13.39
2. $32.00
3. $38.25

**p. 22**

1. $34.43
2. $59.82
3. $60.44
4. $34.96
5. $19.13

**p. 23**

1. $20
2. $30
3. $62

**pp. 24-25**

1. $239.84
2. $351.19
3. $413.75
4. $310.85
5. $407.22
6. $81.58; $184.17
7. $87.12; $177.88

**Quiz (pp. 13-14)**

1. $228; $68.40; $296.40
2. $29.25
3. $300
4. $150.96
5. $51.64
6. $20
7. $298.11
8. $635

3.0

# Quiz

*Solve the following problems using a separate sheet of paper for computation. Write the correct answers in the spaces provided.*

1.  Write a deposit slip for James C. Morrison for $26 cash and checks for $320.10, $516.00, and $25.40. James wants cash back of $50.00 The date of the transaction was September 10, 1994. What is his net deposit?

| CHECKING ACCOUNT DEPOSIT SLIP | | | CASH | CURRENCY | | | |
|---|---|---|---|---|---|---|---|
| | | | | COIN | | | |
| | | | List Checks Singly | | | | |
| | | | | | | | 16-66 |
| | | | | | | | 1220 |
| DATE _____ 19 ____ | | | TOTAL FROM OTHER SIDE | | | | USE OTHER SIDE FOR ADDITIONAL LISTING |
| | | | TOTAL | | | | |
| | | | LESS CASH RECEIVED | | | | |
| SIGN HERE FOR CASH RECEIVED | | | NET DEPOSIT | | | | BE SURE EACH ITEM IS PROPERLY ENDORSED |

## Citizens State Bank
Sears Plaza   Chicago, Illinois 20002

⑆1220   0667⑈ 314305519⑈

2.  Write a check for James C. Morrison to Good's Gym for $216 for a year's membership. The balance in the account before writing this check is $1522.80. The date is September 20, 1994.

350

_____ 19 ____

16-66
1220

PAY TO THE
ORDER OF_____ $_____

_____ DOLLARS

## Citizens State Bank
Sears Plaza   Chicago, Illinois 20224

MEMO _____     _____

⑆1220  0667 ⑈ 314305519 ⑈

3.0

3.  Using the information given below, reconcile John's checkbook balance
    with the bank statement balance.

### Lottamoney State Bank
Plaza One, Anywhere, USA 20002

John Doe
#17 Main St. Apts
7346 N. Main
Anywhere, USA 20002

Account #: 3143055
Closing Date: 10/28/94
Beginning Balance: $1095.27

**CHECKS**

| CHECK NUMBER | DATE PAID | AMOUNT | CHECK NUMBER | DATE PAID | AMOUNT |
|---|---|---|---|---|---|
| 250 | 9/4/94 | 189.40 | | | |
| 252 | 9/7/94 | 25.00 | | | |
| 253 | 9/10/94 | 15.00 | | | |
| 255 | 9/12/94 | 67.75 | | | |
| 256 | 9/17/94 | 143.50 | | | |

**DEPOSITS**

| DATE PAID | AMOUNT | DATE PAID | AMOUNT |
|---|---|---|---|
| 9/8/94 | 71.25 | | |

**OTHER CHARGES**

| CHARGE | DATE PAID | AMOUNT |
|---|---|---|
| Service Charge | 9/28/94 | 1.40 |

Ending Balance: $744.72

| CHECK NO | DATE | CHECKS ISSUED TO OR DESCRIPTION OF DEPOSIT | (-) AMOUNT OF CHECK | | √T | (+) AMOUNT OF DEPOSIT | BALANCE | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1093 | 52 |
| 249 | 8/28 | Jiffy Mart | 29 | 68 | | | 1063 | 84 |
| 251 | 9/2 | Jiffy Mart | 12 | 75 | | | 1051 | 09 |
| 252 | 9/5 | Cash | 25 | 00 | | | 1026 | 09 |
| 253 | 9/7 | Smith's Gas Station | 15 | 00 | | | 1011 | 09 |
| 254 | 9/8 | Elite Dept. Store | 42 | 80 | | | 968 | 29 |
| 255 | 9/10 | City Electric Co. | 65 | 75 | | | 902 | 54 |
| 256 | 9/13 | Economy Car Company | 143 | 50 | | | 759 | 04 |
| | | | | | | | | |

## Balance Sheet

**Bank balance:** _____

**Add:**
Deposits not credited:

_____ + _____

**Subtotal:** _____

**Subtract:**
Outstanding checks:

_____ + _____ + _____

**Subtotal:** _____

**Actual bank balance:** _____

**Checkbook balance:** _____

**Add:**
Deposits not credited:

_____ + _____ + _____

**Subtotal:** _____

**Subtract:**
Checks not recorded and
Service charges:

_____ + _____ + _____

**Subtotal:** _____

**Actual bank balance:** _____

3.0

Use the chart below to solve the problems that follow.

| Compound Interest Table | | | |
| Value of $1 | | | |
| Number of Periods | 8% | 9% | 10% |
|---|---|---|---|
| 1 | 1.0800 | 1.0900 | 1.1000 |
| 2 | 1.1664 | 1.1881 | 1.2100 |
| 3 | 1.2597 | 1.2950 | 1.3310 |
| 4 | 1.3605 | 1.4116 | 1.4641 |
| 5 | 1.4693 | 1.5386 | 1.6105 |
| 6 | 1.5869 | 1.6771 | 1.7716 |
| 7 | 1.7138 | 1.8280 | 1.9487 |
| 8 | 1.8059 | 1.9926 | 2.1436 |
| 9 | 1.9990 | 2.1719 | 2.3579 |
| 10 | 2.1589 | 2.3674 | 2.5937 |

4. $15,000 is deposited at 8% interest compounded annually. What is the amount in the account after 6 years?

_____

5. $3000 is deposited in an account at 10% compounded annually for 2 years. How much is in the account at the end of the second year?

_____

Use the chart below to solve the problems that follow.

| Monthly Installment Factors | | | | |
| Interest Rate | Number of Months | | | |
| | 12 | 18 | 24 | 30 |
|---|---|---|---|---|
| 12.0% | .0888488 | .060982 | .0470735 | .0387481 |
| 12.5% | .0890829 | .0612146 | .0473073 | .0389844 |
| 13.0% | .0893173 | .0614476 | .0475418 | .0392215 |
| 13.5% | .0895520 | .0616811 | .0477770 | .0394595 |
| 14.0% | .0897871 | .0619152 | .0480129 | .0396984 |
| 14.5% | .0900225 | .0621497 | .0482494 | .0399380 |

6. Find the interest on a loan of $15,000 at 12% for 18 months.

_____

**3.0**

7. Find the total amount on the loan in problem 6.

   _____

8. Find the monthly payment on the loan in problem 6 and 7.

   _____

9. Find the interest and monthly payment for a $9000 loan at 14% for 2 years.

   interest _____

   total amount _____

   monthly payments_____

# Banking and Checking

**You Try (p. 35)**

1. $60
2. 16-66
3. $35
4. 4/18/94
5. $95
6. less cash received; #6
7. net deposit; #7
8. her signature

**You Try (p. 37)**

1-6  Answers will vary.

**pp. 38-42**

1-3  Correct answers will be determined by the teacher.
4. deposit: $436.23
5. Alex's new balance: $471.23
6. $300.13
7. Correct answers will be determined by the teacher.

**You Try (p. 44)**

1. 101
2. 4/18
3. Will U Chek It
4. blouse
5. $29.33
6. 4/19; $90
7. $201
8. $171.67
9. $261.67

**pp. 48-49**

1. $475.05; $475.05
2. $542.94; $542.94
3. $407.88; $407.88

**You Try (p. 51)**

new balance: $1013.27

**You Try (p. 53)**

amount: $870.02
original principal: $865.84
compound interest: $4.18

**pp. 54-55**

1. $12; $812; $12.18: $824.18
2. $40; $2040; $40.80; $2080.80
3. $550; $22,550; $563.75; $23,113.75
4. $14,807.44
5. $21,936.47

**You Try (pp. 58-59)**

1. 24
2. yes
3. yes
4. $630
5. $28.75
6. $680
7. $1520; $2200
8. Check savings box. New Nations Bank; 3698-852147; $943.06

**You Try (p. 61)**

interest owed: $420
total amount: $1920
monthly installment payment: $80

**p. 62**

1. $900; $5900; $327.78
2. $325; $2825; $235.42
3. $562.50; $3562.50; $197.92
4. $1960; $8960; $373.33
5. $4331.78; $12,582.78; $419.43

**p. 63**

1. $624.96
2. $3608.28; $358.28
3. $52.42; $333.08
4. $5202; $867
5. $2400; $240

**pp. 64-65**

1. $1040; $210
2. $937.50; $329.86
3. $31,200; $650
4. $4012.50; $133.75
5. $2520; $14,520

**Quiz (pp. 17-20)**

1. $2615.60
2. Answers will be determined by the teacher.
3. Actual bank balance: $659.49
4. $23,803.50
5. $3630
6. $914.73
7. $15,914.73
8. $844.15
9. $557.23; $9557.23; $398.22

1.0
6.0

# Quiz

*Solve the problems below. Use a separate sheet of paper for computation and write the correct answer on each line.*

1. Find the selling price of a pair of Reebok™ sneakers if the retailer's cost of goods is $40.25 and the markup is $20.75.

   _____

2. Find the selling price of a bike if the retailer's cost is $120.50 and the markup is $105.52.

   _____

3. Find the amount of markup on a $1500 item if the percent of markup is 52%.

   _____

4. If the markup on stereo equipment is 42%, what is the amount of markup on a stereo that costs $350?

   _____

5. Find the selling price of a pair of shorts that cost the dealer $7.00 if the markup is 20%.

   _____

6. Bobby's Hardware had sales of $3820 for May. The cost of goods was $1952 and operating expenses were $850. What was Bobby's gross profit and what was the net profit?

   gross profit _____

   net profit _____

**$** 1.0
6.0

7. Find the unit price of 1 apple if 12 apples cost $2.90.

   _____

8. Which is the better buy, 2 dozen oranges for $4.90 or 1 dozen oranges for $2.59? The oranges are of the same quality and size.

   _____

9. What is the amount of discount if a car that sells for $15,250 is sold for 20% off the original price?

   _____

10. Find the amount of discount and the sale price of a table that originally cost $260. It is now on sale for 25% off.

    discount _____

    sale price _____

11. Complete the chart for T. K. Aimes' Hardware store.

| Sales | Cost of Goods | Gross Profit | Operating Expenses | Net Profit |
|-------|---------------|--------------|--------------------|------------|
| $3525 | $2015 | _____ | $562 | _____ |

12. Find the rate of discount of the original price is $8.50 and the amount of discount is $2.55.

    _____

# Buying and Selling

13. A new shirt costs $22.50, including tax, and you give the clerk $30. How much change do you get back?

   _____

14. Find the sales tax on a tape which sold for $10.95 if the rate of tax is 7%.

   _____

15. Find the total price of a $159.95 ring if there is as 7% sales tax on the ring.

   _____

16. A new leather jacket sold for $139.95. There was a 10% excise tax and a 5% sales tax on the jacket. What was the excise tax? What was the sales tax? What was the total amount?

   excise tax _____

   sales tax_____

   total amount _____

17. Stefan bought 3 shirts and 6 pairs of socks for $85.24, including tax. How much change will he receive if he gives the clerk $90.25?

   _____

18. Marlita bought a CD player and a VCR for $251.90, including tax. She gave the clerk $260. How much change will she receive?

   _____

19. Gërta bought a toaster for $39.95. What is her total cost if the sales tax is 7%?

   _____

# Buying and Selling

**You Try (pp. 73-74)**

   cost: $78.46
   gross profit: $31.38
   selling price: $109.84
   net profit: $11.38

**pp. 75-76**

1. $56
2. $544.50
3. $45.20
4. $129.36
5. $270
6. $130.90
7. $159.60
8. $378
9. $290.40
10. $472.50
11. $189
12. $4.80
13. $3.10
14. $5.10
15. $18
16. $880
17. $3201.71

**pp. 77-78**

1. $.38; $.98
2. $.41; $.86
3. $.15; $.52
4. $2.46; $3.28
5. $.15; $.54
6. $117.00
7. $1704
8. $33.75
9. $150
10. $71.60; $288.58
11. $50; $249.98
12. $950.40; $6230.40
13. $1972.29; $279.34

**You Try (p. 80)**

   unit price #1: $1.66
   unit price #2: $1.50
   unit price of Hanes 3-pk.: >

**You Try (p. 82)**

   discount: $7.20
   sale price: $16.80

**You Try (p. 83)**

   sales tax = .06 x ($2.69 + $3.19 +
     $2.19 + $5.79)
   sales tax: $.87
   purchase price = $14.56 + .87
   purchase price: $15.43

**p. 84**

1. $.08
2. $.23
3. $.29
4. $.02
5. $.47
6. $.25
7. $.22
8. $6.45
9. $2.85

**pp. 85-86**

1. $.19; $.17; 20-lb. bag
2. $.40; $.34; 5-lb. bag
3. $.33; $.32; $.34; 5 oz. for $1.59
4. $.381; $.380; 5 cans of Coke
5. $.049; $.040; 32 oz. for $1.29
6. $.082; $.109; 12 oz. for $.99
7. 1 lb. for $.98
8. $.258; $.259; 10 lb. bag

**p. 87**

1. $3.75
2. $4.20
3. $7.40
4. $62.50
5. $8.91
6. $20.80
7. $46.20
8. $21.25
9. $2.50
10. $5.01
11. $119.70

**p. 88**

1. 40%
2. 10%
3. 15%
4. 50%
5. 25%
6. 12%
7. 22.5%
8. 25.5%
9. 33%
10. 54.5%

**pp. 89-90**

1. 20%
2. $12
3. $182
4. 20%
5. $5.99
6. $23.96
7. $233.99
8. $64.99
9. $8.95
10. $3050
11. $182
12. $99.80

**p. 91**

1. $4.17
2. $6.50
3. $56.21
4. $5.33
5. $17.50
6. $1.50
7. $1.16
8. $7.74

**pp. 92-93**

1. $8.15
2. $.43
3. $9.50
4. $15; $25
5. $.87; $2.02
6. $2.25
7. $.77
8. $16

9. $175.95
10. $4.55
11. $14; $7
12. $134.40

**pp. 94-95**

1. $7; $146.95
2. $5; $104.95
3. $19.26; $340.21
4. $25; $524.95
5. $2.40; $42.35
6. $53.50
7. $95.35
8. $16.91
9. $3.00; $62.98
10. $28; $378
11. $42.80
12. $1050; $18,550

**pp. 96-97**

1. $4.22
2. $2.20
3. $3.83
4. $3.58
5. $.80
6. $1.77
7. $4.37
8. $1.25
9. $.48
10. $5.79
11. $7.50
12. $17.64
13. $6.50
14. $3.30
15. $14.07
16. $4.75

# Buying and Selling

**Quiz (pp. 23-25)**

1. $61
2. $226.02
3. $780
4. $147
5. $8.40
6. $1868; $1018
7. 24¢ each
8. 2 dz. for $4.90
9. $3050
10. $65; $195
11. $1510; $948
12. 30%
13. $7.50
14. $.77
15. $171.15
16. $14.00; $7.00; $160.95
17. $5.01
18. $8.10
19. $42.75

2.0

# Quiz

*Solve each problem below. Write the correct answer on each line.*

1. Using the *previous balance* method, find the finance charges on the charge account below.

   FINANCE CHARGE = PREVIOUS BALANCE x MONTHLY RATE

   | Previous Balance | Monthly Rate | Finance Charges |
   |---|---|---|
   | $183.60 | 1.8% | _____ |

2. Find the new balance in problem 1 if the total of purchases was $65.50 and payments and credits were $25.00.

   | Previous Balance | Total Purchases | Finance Charge | Payments and Credits | New Balance |
   |---|---|---|---|---|
   | $183.60 | $65.50 | $3.30 | $25 | _____ |

3. Henry's charge account has a previous balance of $352.10. The rate for the cycle is 1.2% and new payments and credits total $125.00. Using the *unpaid balance* method, find the finance charge.

   _____

   UNPAID BALANCE = PREVIOUS BALANCE – PAYMENTS AND CREDITS
   FINANCE CHARGE = UNPAID BALANCE x MONTHLY INTEREST RATE

4. Henry's balance is $229.83. Find his next month's balance, if his new purchases are $25 and his payment and credits are $15.

   _____

**2.0**

5.  Find Mrs. Johnson's finance charges and new balance with the information given below.

| Average Daily Balance | Periodic Rate | Finance Charge | Previous Balance | Total Purchases | New Balance |
|---|---|---|---|---|---|
| $200 | 1.5% | _____ | $174 | $45 | _____ |

6.  Find the installment payment on an installment loan. Use the chart below for information.

| Amount Financed | Total Interest | Number of Payments | Installment Payment |
|---|---|---|---|
| $265 | $27.50 | 12 | _____ |

7.  Find the total installment cost if the down payment is $125 and the total of monthly payments is $862.50.

_____

8.  The finance charge of $220 is applied to an installment plan on a dirt bike that has a cash price of $1020.50. It will be financed for 18 months. Find the monthly payment.

_____

9.  Robert and Cassandra are considering purchasing a new bedroom suite. The cash price is $1350. If they make an installment loan with a down payment of $150 and make 15 monthly payments of $92, how much would they pay in finance charge? What would be the total cost?

finance charge _____

total cost _____

2.0

10. What is the amount of a 15% down payment for a $350 washing machine?

_____

11. Find the amount of the monthly installment payment for an item that costs $2842 if an $800 down payment is made and interest charges are $652.50. Payments will be made for 18 months.

_____

12. Find the finance charge for the item below.

| Down Payment | Total Installment Payments | Cash Price | Finance Charge |
|---|---|---|---|
| $250 | $1100 | $1210 | _____ |

# Borrowing and Lending

**You Try (p. 104)**

1. yes
2. no
3. yes
4. no
5. 4 years

**You Try (pp. 106-108)**

unpaid balance: $496.23
finance charge: $7.44
finance charge: 0

**You Try (p. 110)**

1. 064-173-357-15
2. 6-25-94
3. $800
4. $50
5. $7.33
6. $496.23
7. $20

**p. 111**

1. $.34
2. $3.24
3. $10.43
4. $1.02
5. $.90
6. $3.66
7. $1.11
8. $.29
9. $2.43
10. $1.50

**p. 112**

1. $35.20
2. $163
3. $40.22
4. $67.75
5. $27.80
6. $3.03
7. 0
8. $411.80
9. $140.35
10. $820.20

**p. 113**

1. $.30; $21.80
2. $1.62; $32.37
3. $.66; $6.47
4. $11.09; $523.59
5. $5.28; $332.53
6. $1.47; $129.64
7. $.63; $7.80
8. 0; $10.80
9. $.25; $9.95
10. 0; $141.74

**p. 114**

1. $18.37; $715.95
2. $10.55; $433.45
3. $8.00; $395.95

**p. 115**

1. $202.02; $3.64
2. $796; $14.33
3. $115.98; $1.86
4. 0; 0
5. $100; $1.71
6. 0; 0
7. $15; $.27
8. $100.90; $1.73
9. $30.84; $.49
10. $196.25; $2.94

**p. 116**

1. $2.25; $261.25
2. $2.80; $228.80
3. $1.88; $206.88
4. $3.83; $228.83
5. $1.44; $236.44
6. $1.73; $220.23
7. $2.25; $153.05
8. $.85; $249.05
9. $330.58

**p. 117**

1. $201.45
2. $167.50
3. $51.50
4. $191.65
5. $176.95
6. $177.30
7. $146.45
8. $176.85
9. $248.89

**You Try (p. 119)**

down payment: $125
amount financed: $500

**You Try (p. 120)**

monthly payment; $31.90
installment price = $574.20
amount financed: $574.20
finance charge: $74.20

**p. 122**

1. $20.21
2. $22.38
3. $50.52
4. $189.52
5. $400
6. $672.80
7. $750
8. $1250

**p. 123**

1. $197
2. $50.51
3. $147.45
4. $810.42
5. $146.10
6. $322.20
7. $235
8. $360

**pp. 124-125**

1. $37.10; $227.90
2. $30.11; $572.09
3. $89.25; $760.75
4. $39.13; $613.07
5. $52.50; $297.50
6. $21; $241.48
7. $348.95; $1832
8. $219; $254.25
9. $51.60; $378.39
10. $300; $1200

**p. 126**

1. $650.40; $785.40
2. $455.40; $505.40
3. $1440; $1690
4. $732; $882
5. $225; $277.60
6. $1890; $2411
7. $459; $599
8. $789.60; $910.55
9. $2169.36; $2385.11
10. $3964.80; $5164.80
11. $4713

**p. 127**

1. $185
2. $227.72
3. $33.22
4. $320
5. $649.75
6. $250

**p. 128**

1. $120.05
2. pay cash; He will save $630.
3. yes; He would pay $661.42 with installment plan and he would save $61.42 if he paid cash.

# Borrowing and Lending

**Quiz (pp. 31-33)**

1.   $3.30
2.   $227.40
3.   $2.73
4.   $242.71
5.   $3; $222
6.   $24.38
7.   $987.50
8.   $68.92
9.   $180; $1530
10.  $52.50
11.  $149.69
12.  $140

8.0

# Quiz

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

1. Find the total cost of each car listed below and the cost of financing.

| Cash Price | Down Payment | Amount Financed | Monthly Payment | Months to Pay | Total Cost | Finance Charge |
|---|---|---|---|---|---|---|
| $17,447 | $500 | _____ | $398 | 48 | _____ | _____ |
| $17,142 | $3000 | _____ | $249 | 60 | _____ | _____ |
| $6845 | $2000 | _____ | $150 | 36 | _____ | _____ |
| $4774 | $750 | _____ | $185 | 24 | _____ | _____ |

2. Lattrice had her car in the shop for repair. Her car needed brake shoes and a complete tuneup. What was her repair bill if the brake shoes were $18.95 and the labor was $45 and the tuneup was $35 for parts with $60 labor? A 6% sales tax is charged on parts but none is charged on labor.

   amount of bill _____

3. Rowena drives 440 miles a week on her job. Her car gets 20 mpg and she buys premium unleaded gas for $1.349 per gallon. What is her gas bill for a week? A year? Round the answer to the nearest cent.

   week _____

   year _____

4. Maurice's dad bought a new car 5 years ago for $18,750. He can sell the car now for $14,250. What was the average annual depreciation?

   average annual depreciation _____

8.0

**ANNUAL PREMIUM = ANNUAL BASE PREMIUM X DRIVER-RATING FACTOR**

5. Susan's driving-rating factor is 1.85. Her liability coverage includes 15/30 bodily injury, and her property damage coverage is $25,000. Her car is in age group C and insurance-rating group 5. She chooses to carry full comprehensive coverage, and $50-deductible collision insurance. Use the charts below to find the annual liability premium, the annual premium for comprehensive and collision, and the annual insurance premium.

### LIABILITY

| PROPERTY DAMAGE LIMITS | BODILY INJURY LIMITS | | | |
|---|---|---|---|---|
| | 15/30 | 25/100 | 50/100 | 100/300 |
| $10,000 | 93.20 | 104.00 | 109.20 | 120.00 |
| $25,000 | 97.20 | 108.00 | 113.20 | 124.00 |
| $50,000 | 100.00 | 111.20 | 116.00 | 127.20 |

| COVERAGE | Age Group | Insurance Rating Group | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1-5 | 6 | 7 | 8 | 9 | 10 |
| Full comprehensive | A | $19.60 | 22.00 | 26.00 | 32.40 | 45.60 | 58.40 |
| | B | $16.40 | 18.40 | 22.00 | 27.60 | 38.80 | 49.60 |
| | C | $14.80 | 16.40 | 19.60 | 24.40 | 34.40 | 44.00 |
| | D | $12.80 | 14.40 | 16.80 | 21.20 | 29.60 | 38.00 |
| Collision $50 deductible | A | $92.00 | 97.20 | 108.00 | 124.40 | 140.40 | 156.80 |
| | B | $78.40 | 82.80 | 92.00 | 105.60 | 129.20 | 133.20 |
| | C | $69.20 | 72.80 | 81.20 | 93.20 | 110.20 | 117.60 |
| | D | $55.20 | 58.40 | 64.80 | 74.80 | 84.40 | 94.00 |

annual liability premium _____

annual premium for
comprehensive and collision _____

annual insurance premium _____

# Purchasing a Car

**You Try (p. 135)**

total options: $2654.50
sticker price: $12,781.50

**You Try (p. 136)**

dealer's cost = $5081.60 + $1067.99
dealer's cost: $6149.59

**You Try (p. 139)**

fair retail price = ($4125 + $250) − $575
fair retail price: $3800

**p. 140**

1. $2454.28
2. $822.55
3. $3499.01
4. $975
5. $854.25
6. $104
7. $202
8. $1310

**You Try (p. 143)**

annual liability premium: $181.74

**You Try (p. 145)**

annual base premium: $68
annual premium: $132.60
annual insurance premium = $181.74 + $132.60;
annual insurance premium: $314.34

**p. 146**

1. $93.20; $167.76
2. $113.20; $350.92
3. $111.20; $161.24
4. $108; $124.20
5. $216.84
6. $412.92

**You Try (pp. 148-149)**

1. 85 Custom Corsair
2. 108,795
3. Richard Schmidt
4. $33.85; $238; labor; $204.15
5. $2.20

**You Try (p. 150)**

total depreciation; $4970
average annual depreciation: $994

**You Try (p. 151)**

cost per mile: $.19

**p. 152**

1. $.11
2. $1432.17; $.12
3. $1539.45; $.26
4. $.06
5. $41.65
6. $.12
7. 35 miles

**p. 153**

1. V
2. F
3. V
4. V
5. V
6. V
7. F
8. V

**p. 154**

1. $2580
2. $1900
3. $1730
4. $4495
5. $1000
6. $15,000; $5000

**Quiz (pp. 39-40)**

1. $16,947; $19,104; $2157
   $14,142; $14,940; $798
   $4845; $5400; $555
   $4024; $4440; $416
2. $162.19
3. $29.68; $1543.36
4. $900
5. $179.82; $155.40; $335.22

52

4.0

# Quiz

*Follow the directions for each item below. Your teacher will provide the necessary forms.*

1. Fill out a W-4 form for Sue N. Jones.

   Sue N. Jones of 217 West Mill Street, Johnson City, MN 56507, is single and works a few hours each month at the local bowling alley. She paid no income tax last year and expects to earn $450 this year. She is 17 years old and a full-time student. Her mother claims her as a dependent. She has no other income. Her Social Security number is 987-00-1200.

2. Use the W-2 Form below to answer the following questions.

| 10-1223243 | 2. Employer's State number ← | Copy C   For employee's records. | |
|---|---|---|---|
| **3. Employer's name**<br><br>ABC Inc.<br>700 W. Washington<br>Bismarck, ND 58501 | 4. Subtotal  Correction  Void<br>☐  ☐  ☐ | State form number | |
| | 5. Employer's identification number<br><br>10-1223243 | City form number | |
| | 6. Advance EIC payment | 7. | |

| 8. Employee's social security no.<br>987-00-0001 | 9. Federal income tax withheld<br>145.90 | 10. Wages, tips, other compensation<br>2140 | 11. FICA tax withheld<br>163.71 | 12. Total FICA wages<br>2140 |
|---|---|---|---|---|
| 3. Employee's name<br>Pat M. Jackson | | 14. Pension plan coverage? yes/no  NO | 15. * | 16. FICA tips |
| 1400 W. Washington<br>Bismarck, ND 58501<br><br>3. Employee's address and zip code | | 18. State income tax withheld | 19. State wages, tips, etc.<br>2140 | 19. Name of State |
| | | 21. Local income tax withheld | 22. Local wages, tips, etc. | 23. Name of locality |
| **Wage and Tax Statement 19—94** | | | | |
| Form W-2 | | | | |

4.0

How much was withheld for federal income tax?

_____

What were Pat's gross wages?

_____

3. Fill out a correct Form 1040A for Lisa M. Sample, who is single, is claimed by her parents as a dependent on their return, and does not want to contribute to the Presidential Election Campaign Fund. Use the W-2 information provided below.

**W-2 information:**

Lisa M. Sample
215 Rogers Street, Garden, LA 64312
SS# 821-00-1234
Gardent Center
500 Rose Lane, Garden, LA 64312
Employer's ID#....................................... 10-5551212
1099-INT information:
Gardent National Bank
101 Main St., Garden, LA 64312
Payer's ID# ............................................ 10-1234567
Fed. income taxes withheld................................ $12
Wages ...................................................................... $1950
SS tax withheld............................................. $120.90
Medicare tax withheld ..................................... $28.28
SS wages....................................................... $1950
Interest income ................................................. $817
SS wages....................................................... $1950
Medicare wages and tips ............................... $1950

4. Use a Child and Dependent Care (Schedule 2) form to answer the following questions about Jason. Jason has 2 sons who attend preschool. It cost Jason and his wife $425 per month for the boys to attend this school.

On which line would Jason write the preschool's name? _____

What number would he put on line 3? _____

What is the maximum amount of qualified expenses that Jason can enter on

line 4? _____

5. Refer to Schedule A–Itemized Deductions to answer the following questions about the Wilsons. Robert and Jane Wilson have medical and dental expenses of $3125. Their adjusted gross income from line 32 is $36,250. Their moving expenses were $2650.

What is the total of the Wilsons' medical and dental expenses that they

should enter on line 1? _____

What is the amount to be entered on line 2? _____

What amount should they enter on line 3? _____

Is the amount on line 3 *greater than* or *less than* line 1? _____

What does that result mean for Robert and Jane? _____

What was the total of the Wilsons' moving expenses? _____

On which line will they enter the amount of moving expenses? _____

# Paying Your Taxes

**You Try (pp. 163-164)**

1. A, B or C, D, E, F
   Line D: 2
   Line G: answers vary
2. A, C, and E
   Answers will vary, but may include using 2 earner worksheets.
3. Line 5

**You Try (p. 166)**

1. $2255
2. FIT: $315.70
   FICA: $151.09
   State income tax: $53.40

**pp. 167-168**

Correct answers will be determined by the teacher.

**p. 169**

1. FIT: $425
2. $2750
3. 000-00-4327
4. Scott's Department Store
5. FICA: $210.38

**You Try (p. 172)**

1. filing status: head of household
   form: 1040
2. filing status: qualifying widower with dependent child
   form: 1040A
3. filing status: single
   form: 1040 EZ

**You Try (p. 177)**

1. refund
2. $145

**pp. 178-179**

Correct answers will be determined by the teacher.

**You Try (p. 182)**

1. Line 1
2. 2
3. $4800
4. .23
5. $1104

**You Try (pp. 185-186)**

1. $4600; Line 1
2. $32,000
3. $2400; Line 3; less than;
   amount of itemized deductions for medical expenses. This cost can be deducted from his taxable income.
4. $3000; Line 18

**pp. 188-189**

1. $2865; Line 1
2. $33,550
3. $214.88; Line 3; less than; amount of itemized deductions
4. $2835; Line 18
5. $3345; Line 1
6. $34,200
7. $250.88; Line 3; less than; amount of itemized deductions
4. $$2835; Line 18

## Quiz (pp. 43-45)

1. Correct answer will be determined by the teacher.
2. $145.90; $2140
3. Correct answer will be determined by the teacher.
4. Line 1; 2; $4800
5. $3125
   $36,250
   $2718.75
   less than
   can deduct the difference of $406.25
   $2650
   Line 18

9.0

# Quiz

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

1.  Joseph purchased a house for $82,750. He made a down payment of 30% of the cost of the house. How much was his down payment?

    _____

2.  The monthly payments on Jerry and Joan's mortgage are $365.60. Their mortgage is for $40,000. How much will they pay in interest if they have a 30-year mortgage?

    _____

3.  Brock's house has a market value of $78,500 and an assessment rate of 80%. What is the assessed value of his house?

    _____

4.  Rae owns a house with an assessed value of $42,500. Her tax rate is 32.5 mills. What is the amount of her property tax?

    _____

5.  Linda's mortgage agreement requires that she insure her house for 80% of its replacement value. The replacement value of her house is estimated to be $74,500. What is the required amount of her insurance policy?

    _____

9.0

6. Linda's insurance policy (in problem 5 above) pays 50% of her policy amount for damage to personal property. If she loses all her household goods in a flood, how much will her insurance pay if her house is insured for 80% of its value?

_____

7. Use the table on page 215 to find the cost of Linda's insurance (problem 5) if she lives in a brick house that is in protection class 10. Her monthly payment would range between what two prices?

_____

8. Find the cost of hardwood flooring for a room that is 18 feet by 12 feet if it costs $12.50 to cover 9 square feet.

_____

9. Tom remodeled his family room at a cost of $2300. If he expects the remodeling to last for 15 years, how much is the cost per year?

_____

10. Find the cost of painting four walls of a room that is 18 feet long, 12 feet wide, and 8 feet high, if the cost of paint is $9.50 per gallon and a gallon covers 500 square feet.

_____

# Choosing a Place to Live

**You Try (pp. 198-199)**

1. Small studio in excellent location. Coin-operated laundry on property. $500 monthly, including all utilities. Available 7/23/94. First month's rent, security and cleaning deposit required. Call 555-2458
2. Cute cabin with view, private sundeck, near town. Woodstove. Available now. $475 monthly. Call 555-5878.
3. Small 2 bedroom apartment with large sundeck close to transportation. $580 first and last month's rent and security deposit of $300. 555-5555 leave a message.
4. Small apartment, 2 bedrooms, 1 bath, fireplace. No pets or smoking. $450 monthly. 555-5346 or 555-4366 leave message.

**You Try (pp. 200-201)**

1. $237.50
2. $515
3. $335
4. $332
5. $2375

**p. 203**

1. $560
2. $274
3. $333.75
4. $320
5. $747.50

**You Try (pp. 206-208)**

down payment: $9375
mortgage loan amount: $53,125
total interest charged: $100,832.60
closing costs = $35 + $106.25 + $60 + $100 + $159.38 + $53.13
closing costs: $513.76

**pp. 209-210**

1. $54,640
2. $374.79
3. $121,698
4. $374.79
5. $66,160: $172,864

**You Try (pp. 211-212)**

assessed value: $55,250
real estate tax: $1215.50

**pp. 213**

1. $1962.50
2. $1800
3. $1122
4. $1760

**You Try (p. 216)**

amount of coverage: $52,000
amount of coverage: $50,000
annual premium: $157

**You Try (pp. 217-218)**

monthly escrow account: $114.38
monthly payment: $542.04

**You Try (p. 219)**

recommended maximum: $743
total monthly costs: $733.15
yes

**p. 220**

1. $219
2. $193
3. $23.08 per month
4. $464.25; yes
5. $773.33

**You Try (pp. 222-224)**

area: 448
amount of paint needed: 1.12
amount of paint to purchase: 2 gal.
perimeter: 300 ft.
amount of fencing: 300 ft.
wall area: 352 sq. ft.
single rolls needed: 4.88
single rolls to buy: 5
double rolls: 3
cost: $97.30

**p. 225**

1. $257.78
2. $164.80
3. 4 double rolls
4. 384 feet
5. $51.52

**Quiz (pp. 49-50)**

1. $24,825
2. $91,616
3. $62,800
4. $1381.25
5. $59,600
6. $29,800
7. $197–$229
8. $300
9. 153.33
10. $9.50

4.0

# Quiz

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

1.  Sylvia decided to take out a 4-year certificate of deposit which was paying 7.25%. She deposited $2000. How much interest will she have in her account at the time of maturity? (Use the table on page 236 in the student book.)

    _____

2.  Sean purchased a savings bond with a face value of $300. What was the cost of the bond?

    _____

3.  Richard purchased a $300 Series EE bond and cashed it in five years after he purchased it. How much was the accrued interest? (Use the table on page 243 in the student book.)

    _____

4.  Determine the current yield (to the nearest tenth of a percent) of a bond with a par value of $1000 that has a quoted price of 82 ¼ and a rate of 6 ¾ return.

    _____

5.  Find the cost of buying 100 shares of stock at $10.50 per share with a broker's fee of $30.

    _____

53

4.0

6. What is the total dividend paid on 200 shares of stock whose dividends are $.265 per share?

_____

7. Laura bought 200 shares of Idaho P at the closing price in the chart shown on page 257 in the student book. How much did she pay for the stock?

_____

8. Laura (problem 7) had to pay her broker a 1% commission. How much did the stock cost Laura in all?

_____

9. Laura (problems 7 and 8) later sold her stock for 35 ¼ through the same broker. How much profit or loss did she make?

_____

10. David had an annual salary of $21,000. If he has 7% of his salary deducted for savings, how much is placed in savings each week?

_____

# Investing Your Money

**You Try (p. 237)**

total amount: $1544.89
interest earned: $544.89

**pp. 239-241**

1. $529.59; $29.59
2. $2032.31; $32.31
3. $4233.90; $1033.90
4. $2162.84; $312.84
5. $18,963.48; $8963.48
6. $2568; $568
7. $6637.22; $3137.22
8. $507.14; $7.14
9. $13,330.04; $4830.04
10. $1040.98
11. $22,169.44; $2169.44
12. $2354.35

**You Try (p. 243)**

cost of Series EE bond: $250
redemption value: $50.55

**You Try (p. 246)**

market price: $950
discount
annual interest: $65
annual yield: 6.8%

**You Try (pp. 248-249)**

total price: $596
total price: $1006

net asset value: $18.96
amount received: $474

loading rate: 05
loading charge: $25

no. of charges = $500 − $25 + $18.27
number of shares = $475 + $18.27
number of shares: 25.99 or 25

**p. 250**

1. $250
2. $100; $102.20
3. $60.42
4. $6029

**p. 251**

1. $1163.75
2. $1095
3. $49.95
4. 107.42

**You Try (pp. 253-254)**

annual dividend per share: $1.75
current yield: 5.48%

annual dividends per share: $1.75
total annual earnings: $70

annual income expected: $930
number of shares: 300

total market price: $14,400

commission: $261

total investment: $14,661

**You Try (pp. 255-256)**

price per share: $42.50
selling price: $1700

selling price: $1700; commission: $35.75
profit: $387.36

selling price per share: $12.50
total market price: $1875

total market price: $1875
net proceeds: $1831.17

**p. 258**

1. $5000; $5075.50
2. $7500; $7580
3. $2100; $2163
4. $5500; $5577
5. $7200; $7325.50
6. $30,000; $30,900
7. $5500; $5665
8. $5625; $5765.63
9. $500; $3060
10. $2250; $67.50

**p. 259**

1. $109
2. $53
3. $150.75
4. $276.25
5. $131.25
6. $75.38
7. $130
8. $57

**p. 260**

1. $2204.50
2. $1287.66
3. $3662.50
4-5. Teacher will determine the correct answers.

**You Try (p. 263)**

property value: $45,000
depreciation: $900

annual expenses = $4800 + $900 + $2680
annual expenses: $8380

rent per month: $800
annual rental income: $9600

annual net rental income = $9600 - $8380
annual net rental income: $1220

**p. 265**

1. $6260
2. $9840
3. annual rental income: $6900
   annual expenses: $5815
   annual net rental income: $1085
4. $2870

**p. 266**

1-4. Answers will vary.

**Quiz (pp. 53-54)**

1. $672.78
2. $150
3. $77.40
4. 8.2%
5. $1080
6. $53
7. $7300
8. $7373
9. $393.50; loss
10. $29.21

10.0

# Quiz

*Solve the problems below. Write the correct answer on each line.*
*Round each answer to the nearest cent.*

**ANNUAL PREMIUM = NUMBER OF UNITS PURCHASED x PREMIUM PER $1000**

**NUMBER OF UNITS PURCHSASED = FACE VALUE ÷ UNIT VALUE**

| Annual Premiums Per $1000 of Life Insurance | | | | | |
|---|---|---|---|---|---|
| Age Male | Age Female | Term to Age 65 | Whole Life | 20-Year Payment | 20-Year Endowment |
| 20 | 25 | $ 7.01 | $ 13.61 | $ 25.16 | $ 45.22 |
| 25 | 30 | 7.87 | 15.57 | 27.63 | 45.49 |
| 30 | 35 | 9.06 | 18.30 | 30.60 | 46.04 |
| 35 | 40 | 10.66 | 21.74 | 33.97 | 47.42 |
| 40 | 45 | 12.93 | 26.25 | 38.69 | 47.42 |
| 45 | 50 | 15.88 | 32.15 | 44.49 | 52.56 |
| 50 | 55 | 20.27 | 39.92 | 51.38 | 57.23 |
| 55 | 60 | 28.43 | 49.49 | 60.15 | 63.00 |

| | Insured | Age | Ann. Prem. per $1000 | Type of Coverage | Coverage | No. of Units | Annual Premium |
|---|---|---|---|---|---|---|---|
| 1. | Angela | 25 | _____ | term | $30,000 | ____ | _____ |
| 2. | Randy | 32 | _____ | whole | $25,000 | ____ | _____ |
| 3. | José | 45 | _____ | 20-year | $40,000 | ____ | _____ |
| 4. | Helen | 60 | _____ | 20-yr. endow. | $75,000 | ____ | _____ |

5. Juan decided to protect his family by taking our a whole life insurance policy for $50,000. He is 25 years old. What will be his annual premium?

Juan's premium_____

10.0

SEMI-ANNUAL PREMIUM = PERCENT X ANNUAL PREMIUM

QUARTERLY PREMIUM = PERCENT X ANNUAL PREMIUM

MONTHLY PREMIUM = PERCENT X ANNUAL PREMIUM

> **Optional Payment Plans
> Percent of Annual
> Premium**
>
> Semiannual Premiums = 50.5%
> Quarterly Premiums = 25.5%
> Monthly Premiums = 8.5%

| | Insured | Ann. Prem. | Payment Plan | Premium Due |
|---|---------|-----------|--------------|-------------|
| 6. | Angela | $175.25 | Semi-annual | _____ |
| 7. | Randy | $760.90 | Quarterly | _____ |
| 8. | Shakita | $169.85 | Semi-annual | _____ |
| 9. | Terrell | $1013.50 | Monthly | _____ |

**10.0**

10. Jamie wants to buy a $50,000 whole life policy. Her annual premium is $1607.50. If she paid her premiums quarterly, what will her premiums be?

Jamie's premium _____

## SOCIAL SECURITY TAX = TAX RATE x EARNINGS

| Year | Maximum Gross Income Subject to Tax | FICA Tax Rates | | | |
|---|---|---|---|---|---|
| | | Employee | | Self-Employed | |
| | | Tax Rate | Maximum Contribution | Tax Rate | Maximum Contribution |
| 1988 | $45,000 | 7.15% | $3217.50 | 10.00% | $4500.00 |
| 1989 | $48,000 | 7.15% | $3432.00 | 10.00% | $4800.00 |
| 1990 | $51,300 | 7.65% | $3924.45 | 10.00% | $5130.00 |
| 1991 | $53,400 | 7.65% | $4085.10 | 10.00% | $5340.00 |
| 1992 | $53,000 | 7.65% | $4054.50 | 10.00% | $5300.00 |
| 1993 | $57,600 | 7.65% | $4406.40 | 10.00% | $5760.00 |
| 1994 | $60,600 | 7.65% | $4635.90 | 10.00% | $6060.00 |

| | Name | Gross Income | Emp. Year | Soc. Sec. Status | Tax |
|---|---|---|---|---|---|
| 11. | Angela | $48,000 | 1990 | self-employed | _____ |
| 12. | Tamika | $58,200 | 1994 | employee | _____ |

13. Juan's annual salary in 1993 was $33,900. How much Social Security tax did he pay if he was self-employed?

Juan's Soc. Sec. tax _____

10.0

| Examples of Hospital and Medical Insurance Coverage | | |
|---|---|---|
| | **Hospital Insurance** | **Medical Insurance** |
| **Covered** | • Semi-private room<br>• Regular nursing services | • Physician's services<br>• Casts, wheelchairs |
| **Not Covered** | • Convenience Items<br>  TV<br>  Telephone | • Prescription drugs<br>• Routine physical exams<br>• Eyeglasses, hearing aids |
| **Cost to Patient** | • $180 deductible | • $60 deductible<br>• 20% of remaining cost |

PATIENT'S SHARE OF HOSPITAL COST = DEDUCTIBLE + UNCOVERED EXPENSES

MEDICAL COST = DEDUCTIBLE + UNCOVERED EXPENSES + 20%(PHYSICIAN'S FEES − DEDUCTIBLE)

TOTAL COST = PATIENT'S SHARE OF HOSPITAL COST + PATIENT'S SHARE OF MEDICAL COST

14. Gërta's aunt had major surgery 2 weeks ago. She asked Gërta to help her determine the cost of her hospital expenses. The hosital sent a bill for $12,000 including $40 for TV, $20 for telephone service, $250 for prescriptions and $3500 for physician services. What was her share of the total cost?

    hospital cost _____

    medical cost _____

    total cost _____ .

# Planning for Retirement

$$\text{FINAL AVERAGE SALARY} = \text{SUM OF THE LAST FIVE YEARS} \div 5$$

$$\text{ANNUAL PENSION} = \text{FINAL AVERAGE SALARY} \times \text{YEARS OF SERVICE} \times \text{RATE OF BENEFIT}$$

15. Chris is trying to determine his retirement benefits. He plans to work for 25 years or until he is 62 years old. He figures that, at his present rate, his last five years should be as follows: $44,000; $48,000; $50,000; $52,000; and $54,000. The company's rate of benefit is 1.5%; what will his annual pension be?

_____

**10.0**

FIT BEFORE KEOUGH CONTRIBUTION = FIT RATE X TAXABLE INCOME

CONTRIBUTION TO KEOUGH = 10% OF GROSS INCOME

TAXABLE INCOME AFTER KEOUGH CONTRIBUTION = TAXABLE INCOME – CONTRIBUTION TO KEOUGH

FIT AFTER KEOUGH CONTRIBUTION = FIT RATE X TAXABLE INCOME AFTER KEOUGH CONTRIBUTION

TAX SAVINGS = FIT BEFORE KEOUGH CONTRIBUTION – FIT AFTER KEOUGH CONTRIBUTION

16.  Jim decided he needed additional income to maintain his standard of living. He determined his gross income would be $36,500. His taxable income after business expenses would be $26,900. The FIT rate is 20% of his taxable income. Randy contributed 10% of his gross income to his Keough account. This reduced his income tax to 18% of his taxable income. How much did he save in federal income tax?

FIT before Keough contribution _____

contribution to Keough _____

taxable income after Keough contribution_____

FIT after Keough contribution _____

tax savings _____

10.0

17. If you were deciding to make investments as a way of earning additional retirement benefits, how much would you invest? In what company would you invest your money? Why? Explain your answer.

How much? _____

What company? _____

Why? _____

_____

_____

_____

# Planning for Retirement

**You Try (pp. 274-275)**

number of units purchased: 50
annual premium = 50 x $13.61
annual premium: $680.50
face value: $75,000
number of units purchased: 75
annual premium = 75 x $45.22
annual premium: $3391.50

**You Try (p. 276)**

quarterly premium = 25.5% x $3391.50
quarterly premium: $864.83

**p. 277**

1. $7.01; 25; $175.25
2. $18.30; 50; $915.00
3. $44.49; 10; $444.90
4. $63; 75; $4725
5. $20.27; 30; $608.10
6. $46.04; 80; $3683.20
7. $49.49; 20; $989.80
8. $44.49; 45; $2002.05
9. $677.25
10. $9882

**p. 278**

1. $196.57
2. $390.15
3. $130.59
4. $126.20
5. $786.11
6. $92.40
7. $614.18
8. $536.11
9. $172.70

**You Try (p. 280)**

FICA Tax = 7.65 x $39,765
FICA Tax = .0765 x $39,765
FICA Tax: $3042.02
amount employer contributed annually:
   $3042.02

**You Try (pp. 282-283)**

1. $180; $230
2. $340; $140; $540
3. $230; $540; $770

**p. 284**

1. $2800
2. $4605.30
3. $3702.60
4. $5320
5. $4600
6. $5830
7. $3924.45
8. $1453.50
9. $2390
10. $4276.35; $4276.35

**pp. 285-286**

1. $230; $908; $1138
2. $430; $1204; $1634
3. $260; $1408; $1668
4. $230; $748; $978
5. $230; $768; $998

**You Try (pp. 288-289)**

sum of last five years: $292,400
final average salary: $58,480
final average salary: $58,480
annual pension: $19,298.40

**You Try (pp. 292-293)**

1. $32,500; $6500
2. $39,750; $3975
3. $28,525
4. $28,525; $5134.50
5. $1365.50

**pp. 299-300**

1. $37,500
2. $5780; $3850; $4509; $1271
3. Correct answer will be determined by
   the teacher.

**Quiz (pp. 57-63)**

1. $7.01; 30; $210.30
2. $18.30; 25; $457.50
3. $44.49; 40; $1779.60
4. $63; 75; $4725
5. $778.50
6 $88.50
7. $194.03
8. $85.77
9. $86.15
10. $409.91
11. $4800
12. $4452.30
13. $3390
14. $240; $998; $1238
15. $18,600
16. $5380; $3650; $23; $250; $4185; $1195
17. Answers will vary.

# Appendices

# Appendix A

## Correlation of Student Performance Standards
## Course Number: 1205370

| Intended Outcome | Student Performance Standard The student will: | | Addressed | Not Addressed |
|---|---|---|---|---|
| 1. Demonstrate the ability to use rational numbers to solve problems involving purchasing goods and services. | 1.01 | Find selling price, gross profit, and net profit. | 3 | |
| | 1.02 | Find the unit price and determine the best buy. | 3 | |
| | 1.03 | Compute discounts and discount rates. | 3 | |
| | 1.04 | Determine change from a given amount after a purchase. | 3 | |
| 2. Demonstrate the ability to solve problems involving the cost of credit, installment buying, and borrowing money. | 2.01 | Find the amount of finance charge on a charge account. | 4 | |
| | 2.02 | Find the balance due on a charge account statement, including interest charges on unpaid balance. | 4 | |
| | 2.03 | Find the amount of down payment on an installment purchase. | 4 | |
| | 2.04 | Determine the amount of an installment payment. | 4 | |
| | 2.05 | Find the total installment price and carrying charge. | 4 | |
| | 2.06 | Determine the advantages and disadvantages of installment buying. | 4 | |
| 3. Demonstrate the ability to solve problems involving checking accounts, savings accounts, and loans. | 3.01 | Correctly complete a check and fill out deposit slips and check stubs. | 2 | |
| | 3.02 | Reconcile bank statements with checkbook balances. | 2 | |
| | 3.03 | Compute the amount on deposit in a compound interest savings account. | 2 | |
| | 3.04 | Find the interest, total amount, and monthly payment due on a loan. | 4 | |
| | | | | |

# Correlation of Student Performance Standards
## Course Number: 1205370

| Intended Outcome | Student Performance Standard The student will: | | Addressed | Not Addressed |
|---|---|---|---|---|
| 4. Demonstrate the ability to solve problems involving different types of investments (stocks, bonds, money market, real estate, etc.). | 4.01 | Determine the cost of buying stocks and find dividends earned. | 8 | |
| | 4.02 | Determine the selling price and the annual interest on a bond. | 8 | |
| | 4.03 | Find the rate of return on an investment. | 8 | |
| | 4.04 | Distinguish between different types of investments. | 8 | |
| | 4.05 | Discuss risks and returns related to investments. | 8 | |
| 5. Demonstrate the ability to solve problems involving personal income and budgeting (wages, hourly rates, deductions, benefits, etc.). | 5.01 | Find regular and overtime earnings based on an hourly wage. | 1 | |
| | 5.02 | Calculate wages when paid on the price-rate basis. | 1 | |
| | 5.03 | Calculate wages when paid on a commission basis. | 1 | |
| | 5.04 | Find F.I.C.A. deductions on earnings. | 1 | |
| | 5.05 | Determine amounts to be withheld for federal income tax. | 1 | |
| | 5.06 | Find the amount of net income after various deductions and benefits. | 1 | |
| | 5.07 | Prepare a budget. | 1 | |
| 6. Demonstrate the ability to solve problems involving different kinds of taxes. | 6.01 | Find the sales and excise taxes on a purchase. | 3 | |
| | 6.02 | Find the total price of a purchase including taxes. | 3 | |
| | | | | |

# Appendix A

## Correlation of Student Performance Standards
## Course Number: 1205370

| Intended Outcome | Student Performance Standard The student will: | | Addressed | Not Addressed |
|---|---|---|---|---|
| 7. Demonstrate the ability to complete an income tax form. | 7.01 | Complete both the long and short form for determining income taxes | 6 | |
| | 7.02 | Complete a W-4 withholding exemption form. | 6 | |
| | 7.03 | Complete forms for itemized deductions and child care. | 6 | |
| 8. Demonstrate the ability to solve problems involving buying, owning, and operating an automobile. | 8.01 | Determine the cost of financing a car. | 5 | |
| | 8.02 | Find the cost of operating a car. | 5 | |
| | 8.03 | Determine annual depreciation. | 5 | |
| | 8.04 | Determine premiums for automobile insurance. | 5 | |
| 9. Demonstrate the ability to solve problems involving owning and maintaining a home. | 9.01 | Compare the cost of renting with the cost of buying a home. | 7 | |
| | 9.02 | Determine the cost of buying a home. | 7 | |
| | 9.03 | Determine the property tax. | 7 | |
| | 9.04 | Determine the monthly cost of utilities. | 7 | |
| | 9.05 | Determine policy premiums and company liabilities for fire insurance and home owner's insurance. | 7 | |
| | 9.06 | Calculate and estimate the cost of home repairs and maintanence. | 7 | |
| 10. Demonstrate the ability to solve problems involving provisions for retirement (investments, insurance, social security, etc.). | 10.01 | Solve problems involving investments for retirement including IRA's and TSA. | 9 | |
| | 10.02 | Solve problems involving life insurance to include term and whole life types. | 9 | |
| | 10.03 | Solve problems in involving social security and hospitilization benefits. | 9 | |

# Appendix B

## Multimedia Bibliography

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Cambridge Development Laboratory, Inc.
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P.O. Box 2335
Smyrna, GA 30081-2335
1-800-358-8302

Social Studies School Services
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1-800-421-4246

# Appendix C

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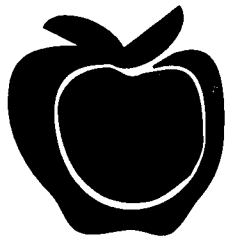
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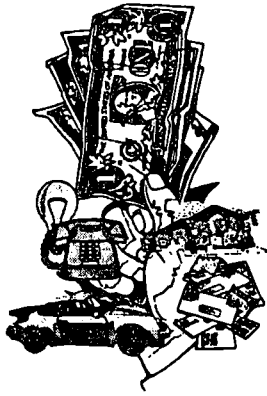
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# Consumer Mathematics

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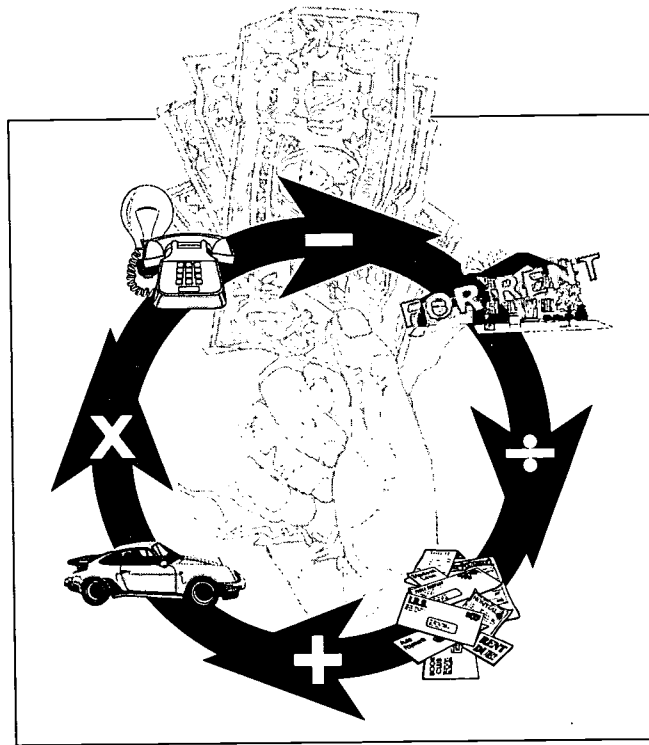


Bureau of Instructional Support and Community Services
Division of Public Schools and Community Education
Florida Department of Education
1995

Parallel
Alternative
Strategies for
Students

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# Consumer Mathematics

## Course No. 1205370

Bureau of Instructional Support and Community Services
Division of Public Schools and Community Education
Florida Department of Education

Reprinted 2001

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# Consumer Mathematics

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# Table of Contents

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# Acknowledgements

# Budgeting Your Income

# Vocabulary

*Study the terms and definitions below.*

## Expenses

budget ................................. a plan for spending and saving money; a plan to meet your obligations and to acquire savings

expenses .............................. money spent on various things that are needed or wanted; costs

fixed ................................... unchanging; remaining the same

income ................................ money received for working, from investments, or other sources

utilities ............................... services such as electricity, gas, water, and garbage pickup

variable .............................. changing from time to time

## Employment Options

application .......................... a form used to file or apply for something, such as a job or government benefit

commission ......................... a percentage of sales paid to a salesperson as wages

hourly rate .......................... wages earned per hour up to 40 hours

3
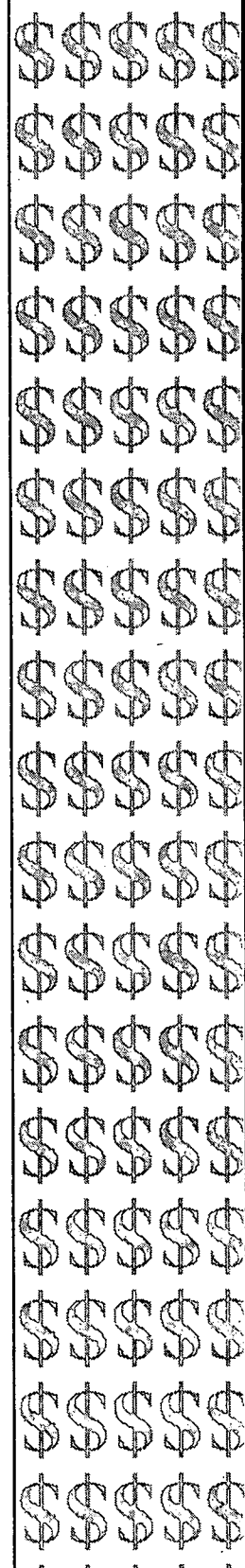
**Go Figure...**
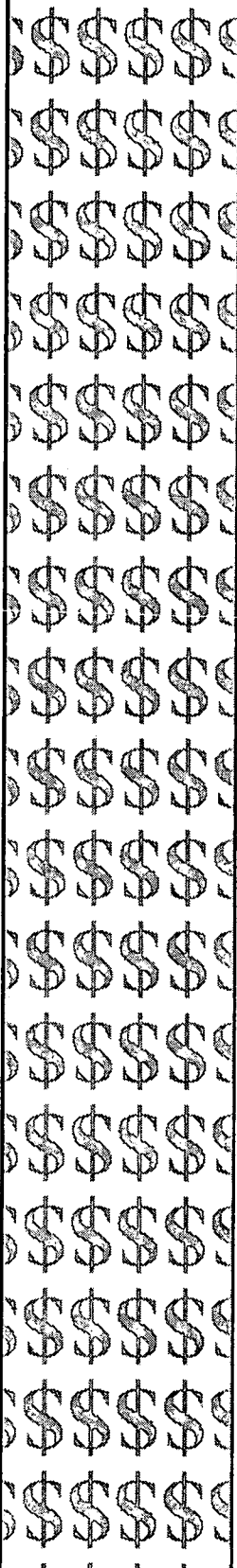
**piece-rate** .......................... work paid for according to the number produced

**salary** ........................................... a fixed amount paid for each pay period

**total sales** .......................... the volume or amount of sales for a specified period

**wages** ...................................... payment for services; usually calculated by the hour, day, or week, or by the piece

## Net Pay

**deductions** ........................... money deducted from gross pay for taxes and other items, such as bonds and insurance

**FICA** ...................................... Federal Insurance Contributions Act

**gross pay** ........................... commission and salary (if a salary is paid); the sum of regular wages and overtime wages

**net pay** .................................. earnings after deductions from gross pay; also called *take-home pay*

**Go Figure...**

# It's Graduation Time...NOW What?!

## Expenses

Gërta Schmidt has been applying to colleges during her senior year at Vandendorff High School. Gërta's first choice is Chauncey Smith University. However, it has no scholarship money to offer Gërta, and the tuition alone is $7500 per year. Gërta's second choice is Goucher College for Women, where Gërta an would pay in-state tuition of $4700 per year. Goucher College for Women has offered Gërta a scholarship of $3000 per year. Gërta's third choice is the two-year junior college in her town. Yearly tuition is low—$2595—but she would have to transfer after two years to a four-year college to complete her college education. What should she do? Which college should she attend?

Gërta has many decisions to make: Should she base her decision on her career interest or on finances? Where will she get the money that she needs to go to the college of her choice? While at college, will she be able to get a job making enough money to pay for all of the things that she will need?

For Gërta to make well informed decisions, she must use some basic math skills. She must be able to predict her living expenses and determine the difference between her needs and her wants. She will need to prepare a record of what her personal expenses will be while at college. Those might include the renting of a room, sharing an apartment with a friend, or getting her own apartment. She will have to determine her cost for groceries and utilities. Lastly, Gërta will have to come up with a budget, or a plan for spending and saving money.

5

**Go Figure...**

**You Try!**
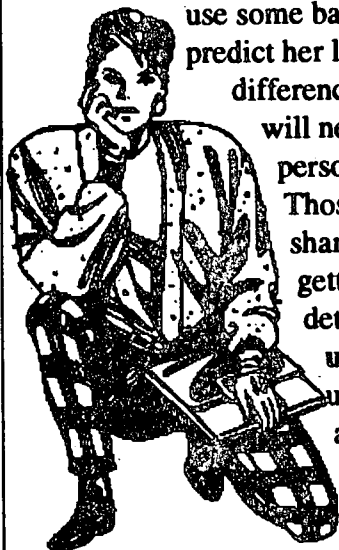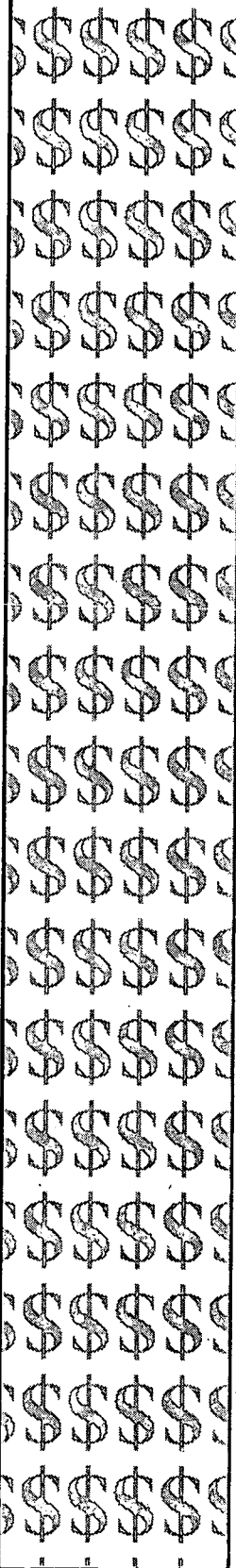
Find Gërta's expenses for one week. Use the Go figure...
space for any of your calculations.

For one week, Gërta made a list of the
money she spent. Every time she bought
something, she wrote it down. Next to
the item she wrote the cost and whether
the expense was a want or a need. Find
her week's expenses and how much
Gërta spent on "wants."

| Purchase | Cost | |
|---|---|---|
| sweater | $40.00 | W |
| pizza | 8.50 | W |
| movie | 5.00 | W |
| repay loan to Mom | 5.00 | N |
| fingernail polish | 4.00 | W |
| toothpaste | 2.17 | N |
| bus fare | 8.00 | N |
| renting a video | 3.00 | W |

| | | |
|---|---|---|
| Needs | $5.00 | |
| | 2.17 | |
| | 8.00 | |
| Total Cost of Needs | $15.17 | |
| Wants | $40.00 | |
| | 8.50 | |
| | 5.00 | |
| | 4.00 | |
| | 3.00 | |
| Total Cost of Wants | $60.50 | |

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## Budgeting Your Income

EXPENSES  =  NEEDS  +  WANTS

EXPENSES  =  $15.17  +  $60.50

EXPENSES  =  $_____

It appears that Gërta has spent $60.50 on things that she wanted. These expenses are called *variable*. They could change, and Gërta could reduce these if necessary. How do *you* spend *your* money?

**Think about all of the things that you've spent money on in the last three days. Be sure to include *everything*—your lunch, sodas, donuts, parking meters, bus fare, library fines, money loaned to a friend, etc.**

1.  On a separate piece of paper, make a list of all of the things you spent money on in the last three days. Next to each one, write *N* if it was a *need*, and write *W* if it was a *want*.

2.  When you have made your list, add up the cost of things that you *needed* in one column. Add up the cost of things that you *wanted* in another column. Compare the totals. How much did you spend on needs? How much on wants?

_____

_____

Remember that Gërta spent a total of $75.67 for the week—$60.50 for things that she wanted, and $15.17 for things that she needed. When Gërta is on her own, her wants and needs will change. She will *need* a place to live, clothing, food, and transportation, and she must consider them as part of her college expenses.

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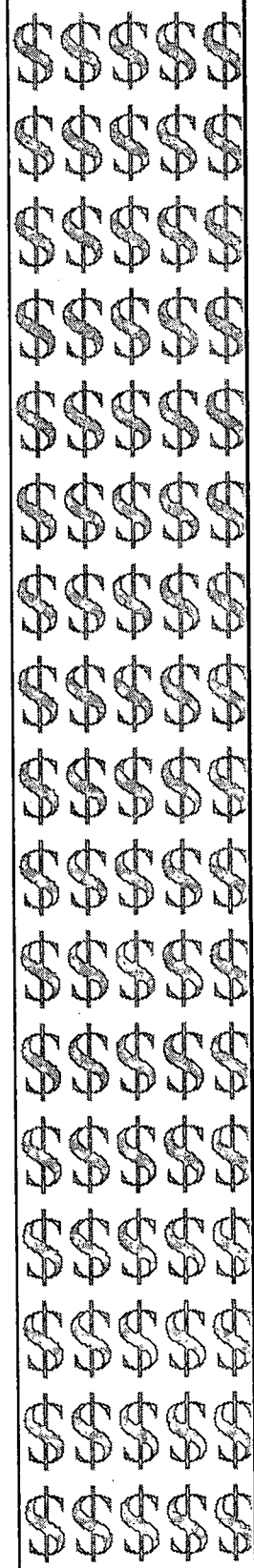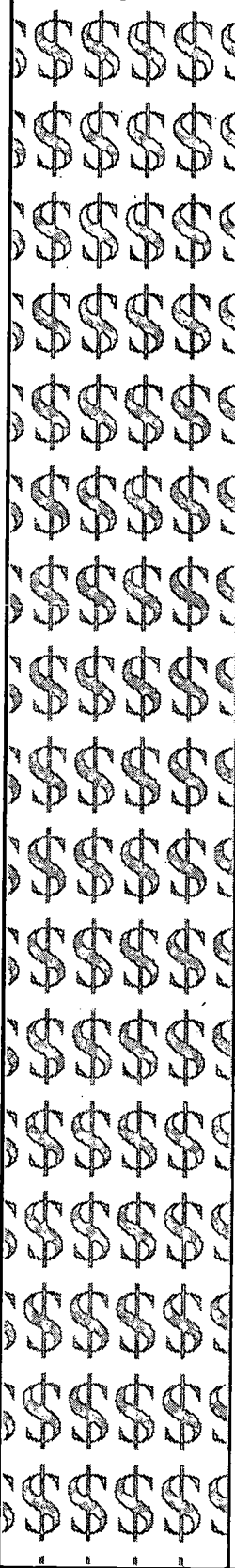
Gërta has decided that she will attend Goucher College for Women to prepare for her career. Gërta will pay the in-state tuition of $4700 per year. She will receive $3000, to help her pay tuition and other fees.

Gërta noted that the difference between her scholarship and what tuition costs is $1700. To meet expenses, she will need a source of **income**. Gërta must earn enough money to pay this difference plus all of her living expenses. With pencil and paper in hand, Gërta sat down to estimate what her costs might be and how much money she must earn.

Gërta first determined her *fixed* expenses, or those expenses that cannot be changed or controlled, such as rent. Then she estimated her *variable* expenses—the amount of which will not always be the same, such as entertainment. Below is Gërta's estimation of her monthly expenses.

### Gërta's Estimated Monthly Expenses

| | | | |
|---|---|---|---|
| apartment rent | $244.00 | utilities | 80.00 |
| groceries | 75.00 | haircut | 15.00 |
| school supplies | 15.00 | savings | 20.00 |
| car insurance | 37.50 | telephone | 23.00 |
| car payment | 150.00 | entertainment | 15.00 |
| gasoline | 40.00 | snacks | 15.00 |
| parking fees | 12.50 | | |

*Time for some practice!*

5.07    $

# Monthly Budget

*Solve the problem below. Fill in the budget items given, and write the correct balance on the line provided.*

1.  Set up a budget for a net income of $1550 per month. The expenses for the month are: rent—$325, utilities—$155, food—$225, insurance total—$125, car payment—$230, loan for car repairs—$125, and miscellaneous expenses—$30. What is the balance after all expenses are paid?

    balance _____

| *Budget* | |
|---|---|
| *Income* | $ |
| *Expenses* | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| *Total Expenses* | $ |
| *Balance* | $ |
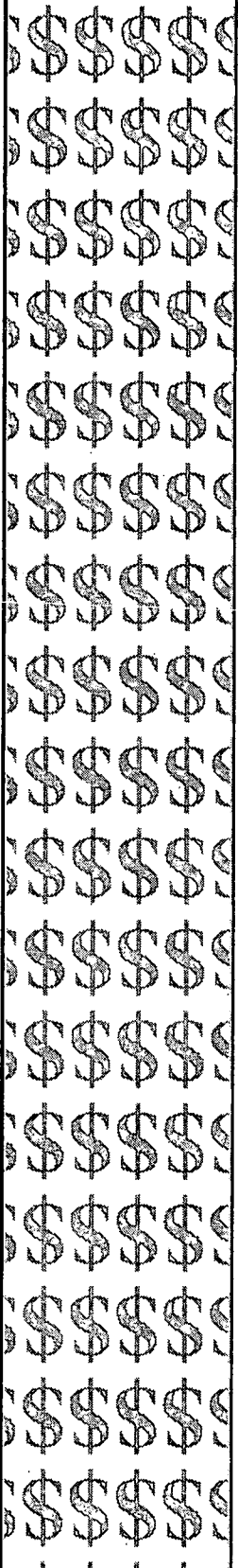
# Hi-Ho, Hi-Ho...It's Off to Work We Go!

**Employment Options**

While Gërta is budgeting and preparing for college, Juan Rivera, who has been working a part-time job while attending Kenwood Vocational Technical School, is ready to find a full-time job. He hopes to be able to earn his **wages**—payment for services—in carpentry to support himself. The *wages* that he will receive are usually calculated by the hour, day, or week, or by the piece. He begins his search by reading the employment ads in the newspaper. He is very interested in the jobs for carpenters; however, he is not sure what his **salary** would be. Let's help Juan to find how much he would earn each week, month, and year.

PLUMBERS, $10–$20 hr. + medical. Exp. in resident & comm. 555-7228

CARPENTERS—apprentice to journey level. $8–$18 hr. + medical. 555-4749.

DRIVER needed for hauling service. Must have phone, own transportation & current DMV printout. $5 hr. to start. $6 after 30 days with chance of advancement & more money. Call 555-5777.

NURSING
RN $15/hr.
LPN $13/hr.
needed for long-term care facility. New hire bonus. 1 week vacation after 6 months. Call Peggy, 555-8832.

The ad gives a range of **hourly rates**—the amount is paid by the hour for services performed. Juan can assume that the lowest salary of $8/hr is for the apprentice level, and the highest salary of $18/hr is for the journeyman level. The ad does not tell how many hours a week a person might work, but Juan guesses that he probably would work 40 hours a week. He should call the phone number listed to find out.

**You Try!**

Use the **Go figure...** space for any of your calculations.

# Budgeting Your Income

If Juan gets the carpenter's job as an apprentice, he would probably make $8/hr. So, how much would he make per week? per year? per month?

WEEKLY SALARY = HOURLY WAGE x HOURS PER WEEK

WEEKLY SALARY = $8 x 40

WEEKLY SALARY = _____

ANNUAL SALARY = WEEKLY SALARY x NO. OF WKS PER YR

ANNUAL SALARY = $320 x 52

ANNUAL SALARY = _____

MONTHLY SALARY = ANNUAL SALARY + NO. OF MOS PER YR

MONTHLY SALARY = $16,640 + 12

MONTHLY SALARY = _____

Not bad for a starting job in his chosen career!

1. How much would Juan make as a journeyman

   per week?        $ _____

   per year?        $ _____

   per month?       $ _____

2. How much would Juan make as a beginning plumber

   per week?        $ _____

   per year?        $ _____

   per month?       $ _____

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**Go Figure...**

After figuring the salary possibilities for the jobs he found in the employment ads, Juan put in an **application**, or a form to apply for a job. He also took advantage of the services of an employment agency—a company that, for a fee, helps people find jobs—and talked to friends who worked where he wanted to work.
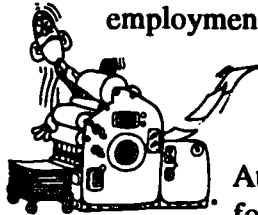
At the interview for the carpenter's job, Juan found out that as an apprentice, he had the option of working on a **piece-rate** basis. This meant that, instead of an hourly rate, he could be paid a specified amount of money for each item that he produced. Juan gave this some thought and decided that if he could work rapidly, he could make more money on a *piece-rate* basis than at the hourly wage. It sounded promising.

The manager of the company also mentioned that the company would have some sales positions opening soon. These positions would be paid on **commission**—money paid for selling a product or service. Juan left the interview with a lot to think about.

Juan returned home with lots of information to help him compare his employment and salary options with the carpentry company. He needed to determine what his weekly salaries would be if he worked on *piece-rate* basis or on *commission*. For *piece-rate* Juan would have to know the *rate per item* and the estimated *number of items he could produce* in a week. For *commission* he needed to know the *commission rate* and the estimated **total sales** that he could make in a week.

**You Try!**

Use the **Go figure...** space for any of your calculations.

# Budgeting Your Income

Below is the information that Juan needs to estimate his weekly wages on piece-rate and commission. Which rate—*hourly, piece,* or *commission*—will pay Juan the most?

HOURLY WAGE = HOURLY RATE x HOURS PER WK

HOURLY WAGE = $8 x 40

HOURLY WAGE = _____

Piece-rate:
rate per item                    $40
estimated number produced    10

PIECE-RATE = RATE PER ITEM x NUMBER ITEMS PRODUCED

PIECE-RATE = $40 x 10

PIECE-RATE = _____

Commission:
commission rate              $8\frac{1}{2}$%
estimated total sales        $4500

COMMISSION = COMMISSION RATE x TOTAL SALES

COMMISSION = $8\frac{1}{2}$% x $4500

COMMISSION = .085 x $4500

COMMISSION = _____

Which of the three rates will pay Juan the highest wages? _____

*Time for some practice!*

13

5.01

# Regular and Overtime Wages

*Using the formulas and rates given below, solve the problems that follow. Use a separate sheet of paper for your calculations, and write the correct answer on each line.*

REGULAR WAGES = REGULAR HOURLY RATE x REGULAR HOURS PER WEEK

1. Seth earns $5 per hour. Last week Seth worked 32 hours. What was his regular pay for the week?

    Seth's regular wages _____

2. Mike earns $6.50 per hour. Last week he worked 38 hours. What was his regular pay for the week?

    Mike's regular wages _____

3. Mike worked six hours on Monday, four hours on Tuesday, six hours on Wednesday, and four hours on Thursday. If Mike makes $4.75 per hour, what was his regular wages for the week?

    Mike's regular wages _____

HOURLY OVERTIME RATE = 1.5 x REGULAR HOURLY RATE
OVERTIME WAGES = OVERTIME RATE x OVERTIME HOURS WORKED

4. Susan earns $4.50 per hour. What is her overtime rate?

    Susan's overtime rate _____

5. Dawn earns $3.80 per hour. What is her overtime rate?

    Dawn's overtime rate _____

# Budgeting Your Income

6. From problem 1 Seth worked six hours overtime this week. Find his overtime rate and his overtime wages for these extra hours.

   overtime rate _____

   overtime wages _____

   **TOTAL WAGES = REGULAR WAGES + OVERTIME WAGES**

7. From problem 1 and 6 what were Seth's total wages this week?

   Seth's total wages _____

8. Kalia worked 47 hours last week. Her regular rate of pay is $6.50. What are her regular wages, overtime wages, and total wages?

   regular wages _____

   overtime wages _____

   total wages _____

9. Sarah is a gas station attendant. She earns $4.00 an hour for a regular 36½-hour week. She earns double time for work on Sundays. Last week Sarah worked her regular hours plus 7 hours on Sunday. What was her total pay for the week?

   total pay _____

10. During one week Fred Murray worked a total of 38 regular time hours at $7.50 an hour and 5 overtime hours at $11.25 and hour. What was Fred's regular pay for the week? What was his overtime pay for the week? What was his gross or total pay for the week?

    regular wages _____

    overtime wages _____

    total wages _____

5.02

# Piece-Rate Wages

*Solve the problems below. Use a separate sheet of paper for calculations, and write the correct answer on each line.*

PIECE-RATE WAGES = RATE X NUMBER OF ITEMS

1. Diondre works on a piece-rate basis at African Art Inc. packing boxes of carved statuettes for shipping. He gets paid $.15 for the first 100 boxes he packs, $.16 for the second 100 boxes, $.18 for the third 100 boxes, and $.20 for any boxes over 300. On Monday he packed 420 boxes. How much did Diondre earn that day?

    Diondre's total pay _____

2. How much would Diondre earn for the week if he packed a total of 1700 boxes?

    Diondre's total pay _____

3. Suzy stuffs envelopes for an advertising company. She gets paid $.10 for the first 100 envelopes, $.15 for the second 100, and $.20 for any envelopes over 200. On Monday she stuffed 500 envelopes. How much did Suzy earn that day?

    Suzy's total pay _____

4. Samantha works in a computer factory. She is paid $.25 for each item she completes. She averages 25 items per hour and works 40 hours a week. Find her average weekly income.

    average weekly income _____

# Budgeting Your Income

$

5. Shaka packs duplicating paper into boxes for which she earns piece-rate wages. On Thursday she packed 425 boxes. If her rate is $.15 for the first 100 boxes she packs, $.16 for the second 100 boxes, $.18 for the third 100 boxes, and $.20 for any boxes over 300, how much did she earn that day?

Shaka's total pay _____

6. Kahlil Colid delivers newspapers for the City Tribune. He is paid 7¢ for every daily paper he delivers and 15¢ for every Sunday paper. What is Kahlil's pay for a week in which he delivers 582 daily papers and 63 Sunday papers?

Kahlil's total pay _____

7. Sandra Miller delivers promotional packets to neighborhood residents after school. She is paid 6.5¢ for each packet she delivers. What is Sandra's total pay for a week in which she delivers 1373 packets?

Sandra's total pay _____

8. Carol Rushing works as a riveter. She is paid 3¢ for each rivet she puts into place. Her daily totals for the week were as follows: Monday 1500, Tuesday 1972, Wednesday 1898, Thursday 2243, and Friday 1189. What is her total pay for a week in which she placed this number of rivets?

Carol's total pay _____

5.03

# Commission Wages

*Using the formula below, solve the problems that follow. Use a separate sheet of paper for your calculations, and write the correct answer on each line.*

COMMISSION = RATE OF COMMISSION x TOTAL SALES

1. Detrick receives 8% commission on all sales. Detrick sold $10,000 in camping equipment last week. What are his wages for the week?

   Detrick's total wages _____

2. Tyrone earns 6% commission on all sales plus $100 salary weekly. If Tyrone sold $6500 in tractor equipment, what were his gross wages for the week?

   gross wages_____

3. Jasmine is leading her company in sales this year. She receives 10% commission on all sales of ski equipment. This week she sold $28,900 in equipment. Find her gross wages for the week.

   gross wages_____

4. Jill receives 1% on all loans which are written plus $5 an hour. Last week she wrote $125,000 in loans and worked 38 hours. What are her gross wages for the week?

   gross wages_____

5. Randall Miller sells burglar alarms. He receives $37.50 for every order that he places for his company. What is his commission for a week in which he places 23 orders for burglar alarms?
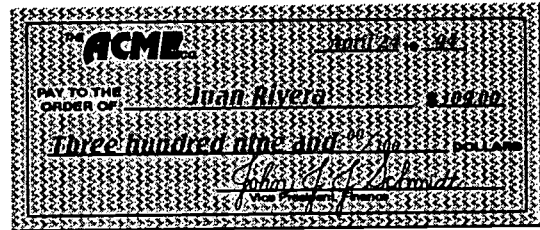
   commission_____

18

108

# So What Do I Get?

## Net Pay

Juan was offered the carpentry job, and he made the decision to take the salary option of piece-rate. Juan was pretty sure that he could make at least 10 cabinets per week, which would give him a weekly salary of at least $400 a week. The hourly salary would give him only $320 per week. Later he might be interested in selling on a *commission* basis.



ACME

PAY TO THE ORDER OF    Juan Rivera    $309.00

Three hundred nine and...

Vice President Finance

| DEPT. | EMPLOYEE | CHECK # | WEEK ENDING | GROSS PAY | NET PAY |
|-------|----------|---------|-------------|-----------|---------|
| 04 | Rivera, J. | 20566 | 9/17/94 | 400.00 | 266.73 |

| TAX DEDUCTIONS | | | | PERSONAL DEDUCTIONS | | |
|-----|-----|-------|-------|---------|------------|--------|
| FIT | FICA | STATE | LOCAL | MEDICAL | UNION DUES | OTHERS |
| 92.17 | 30.60 | ---- | ---- | 10.50 | ---- | ---- |

*Earnings Statement*

After Juan had worked for one month, he received his first paycheck. The check looked familiar to him, but there was an additional piece of paper attached to the check called an *earnings statement.* The statement listed **gross pay**—the wages before any deductions are made—which is what Juan expected to earn. At the bottom of the statement was listed the net pay—*take-home* pay, or pay *after* deductions from the gross pay. The check was for the amount of the net pay.

| Weekly Payroll Period—Single Persons | | | | | | | |
|---|---|---|---|---|---|---|---|
| And the wages are— | | And the number of withholding allowances claimed is— | | | | | |
| At least | But less than | 0 | 1 | 2 | 3 | 4 | 5 |
| | | The amount of income tax to be withheld shall be— | | | | | |
| $170 | $180 | $ 23 | $ 18 | $ 12 | $ 7 | $ 2 | |
| 180 | 190 | 25 | 19 | 14 | 8 | 3 | |
| 190 | 200 | 26 | 21 | 15 | 10 | 4 | |
| 200 | 210 | 28 | 22 | 17 | 11 | 6 | $ 1 |
| 210 | 220 | 29 | 24 | 18 | 13 | 7 | 2 |
| 220 | 230 | 31 | 25 | 20 | 14 | 9 | 3 |
| 230 | 240 | 32 | 27 | 21 | 16 | 10 | 5 |
| 240 | 250 | 34 | 28 | 23 | 17 | 12 | 6 |
| 250 | 260 | 35 | 30 | 24 | 19 | 13 | 8 |
| 260 | 270 | 37 | 31 | 26 | 20 | 15 | 9 |

19

**Go Figure...**

On the earnings statement was a list of *taxes* and personal deductions, or the money that is taken out of gross pay. As Juan read the list of *deductions*, he saw first *FIT*, which stands for *federal income tax*. Employers are required by law to withhold or hold back a certain amount of pay for federal income tax. The Internal Revenue Service (IRS) provides the employer with tables that show how much money to withhold. The amount withheld depends on the employee's income, and marital status, and the withholding allowance that the employee claims.

The next deduction that Juan noticed was one written as *FICA*. *FICA* are the initials for Federal Insurance Contributions Act. This act requires an employer to deduct 7.65% of the first $60,600 of an employee's annual income for *Social Security* taxes. The employer must also contribute an amount that is equal to the contributions of the employee. The government uses Social Security taxes to provide hospitalization insurance for people over 65 years of age, retirement income, survivor's benefits, and disability benefits.

| | Maximum Gross Income Subject to Tax | Social Security Tax Rates | | | |
|---|---|---|---|---|---|
| | | Employees | | Self-Employed | |
| Year | | Tax Rate | Maximum Contribution | Tax Rate | Maximum Contribution |
| 1988 | $45,000 | 7.15% | $3217.50 | 10.00% | $4500.00 |
| 1989 | $48,000 | 7.15% | $3432.00 | 10.00% | $4800.00 |
| 1990 | $51,300 | 7.65% | $3924.45 | 10.00% | $5130.00 |
| 1991 | $53,400 | 7.65% | $4085.10 | 10.00% | $5340.00 |
| 1992 | $53,000 | 7.65% | $4054.50 | 10.00% | $5300.00 |
| 1993 | $57,600 | 7.65% | $4406.40 | 10.00% | $5760.00 |
| 1994 | $60,600 | 7.65% | $4635.90 | 10.00% | $6060.00 |

Being a conscientious person, Juan wanted to make sure that his new employer withheld the right amount of taxes from his check.

**You Try!**

Use the **Go figure...** space for any of your calculations.

# Budgeting Your Income

Juan's gross salary was $400 per month.
What should the FICA be per month?

FICA = 7.65% x THE FIRST $60,600 OF GROSS SALARY

FICA = .0765 x $400 PER MONTH

FICA = _____ PER MONTH

1. How much FICA tax would Juan pay each week if
   he made $175 a week?

   _____

2. If Juan's weekly salary is $235 and he does not have
   any allowances, how much income tax will be
   withheld from his check each week?

   _____

3. If the FICA tax rate remains the same, but Juan's
   gross pay increases to $500 per month, how much
   FICA tax will he pay monthly?

   _____

*Time for some practice!*

21    111
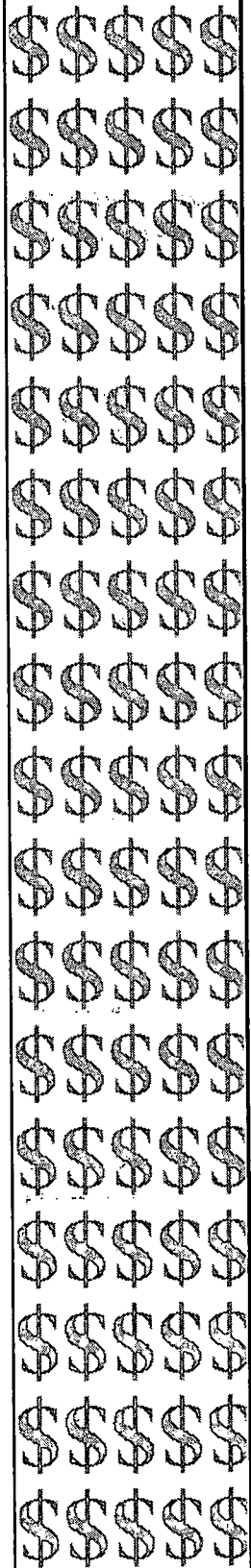
5.04

# FICA Deductions

*Using the formula below, solve the problems that follow. Use a separate sheet of paper for your calculations, and write the correct answer on each line.*

**FICA = 7.65% x THE FIRST $60,600 OF GROSS SALARY**

1. Dugar earned $450 in wages this week. His earnings year-to-date are
   $8600. What is his FICA tax this week?

   FICA tax _____

2. Mary Ann has earned $15,200 to date this year. She made an additional
   $782 this week which is also subject to FICA tax. What is her FICA tax
   this week?

   FICA tax _____

3. Lao has earned $790 this week. What is his FICA tax this week?

   FICA tax _____

4. Inez has earned year-to-date $56,789 on a commission basis. This week she
   earned $457. What is Inez's FICA tax this week?

   FICA tax _____

5. Jon earns $250 each week. This is the 10th week of the year. What is his
   FICA tax for the week?

   FICA tax _____

# Budgeting Your Income

$

## Federal Income Tax

*Using the wage table below, solve the problems that follow. Use a separate sheet of paper for your calculations, and write the correct answer on each line.*

### Weekly Payroll Period—Single Persons

| And the wages are | | And the number of withholding allowances claimed is— | | | | | |
|---|---|---|---|---|---|---|---|
| At least | But less than | 0 | 1 | 2 | 3 | 4 | 5 |
| | | The amount of income tax to be withheld shall be— | | | | | |
| $170 | $180 | $ 23 | $ 18 | $ 12 | $ 7 | $ 2 | |
| 180 | 190 | 25 | 19 | 14 | 8 | 3 | |
| 190 | 200 | 26 | 21 | 15 | 10 | 4 | |
| 200 | 210 | 28 | 22 | 17 | 11 | 6 | $ 1 |
| 210 | 220 | 29 | 24 | 18 | 13 | 7 | 2 |
| 220 | 230 | 31 | 25 | 20 | 14 | 9 | 3 |
| 230 | 240 | 32 | 27 | 21 | 16 | 10 | 5 |
| 240 | 250 | 34 | 28 | 23 | 17 | 12 | 6 |
| 250 | 260 | 35 | 30 | 24 | 19 | 13 | 8 |
| 260 | 270 | 37 | 31 | 26 | 20 | 15 | 9 |

1. Marissa is not married, and her wages for the week are $265. She has three dependents. Find her federal income tax for this week.

    federal income tax _____

2. Engelbert is single and has only one dependent—himself. He made $250 this week. What is the amount of federal income tax he owes?

    federal income tax _____

3. Noah is single and claims no dependents even though he could claim himself. He does this so that he will get a tax refund at the end of the year. His earnings this pay period are $450. He is paid biweekly. What is his federal income tax for the period?

    federal income tax _____

5.06

# Net Income

*Using the formula below, solve the problems that follow. Use a separate sheet of paper for your calculations, and write the correct answer on each line.*

**NET INCOME = GROSS EARNINGS − TOTAL DEDUCTIONS**

1.  The gross earnings for the week are $345 and the total deductions are
    $105.16. What is the amount of net pay?

    net pay_____

2.  The amount of FICA from André's salary is $13.14. His federal income tax
    is $2.67. What is André's net pay if his gross pay is $367 and he has no
    other deductions?

    net pay_____

3.  Jacque's gross pay is $465. His federal income tax is $15.68. FICA tax rate
    is 7.65%. There are no other deductions. Find his net pay.

    net pay_____

4.  Angus' gross pay is $456.25. He will pay 7.65% FICA tax and $61 federal
    income tax. What is his net pay if he also has deducted $45 for
    hospitalization insurance and $4.50 union dues?

    net pay_____

5.  Jada's gross pay is $500. Her FICA tax rate is 7.65%. Her federal income is
    $18.78. Other deductions included $25 for her IRA and $10.75 for union
    dues. Find Jada's net pay.

    net pay_____

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## Budgeting Your Income

$

6. Nicole is not married and claims two dependents. Her weekly salary is $265.75. Use the tax table on page 23 to figure her income tax. Her FICA tax is figured at a rate of 7.65%. Her other deductions are for insurance– $22.50 and dues–$12.75. Find Nicole's total deductions and net pay.

    total deductions _____

    net pay _____

7. Jorgé is not married and claims only one dependent. He is paid weekly and his gross pay is $265. He is subject to 7.65% FICA and federal income tax. His other deductions are $23.10 for insurance and $12.75 for a savings bond. Find his total deduction; then find his net pay.

    total deductions _____

    net pay _____

**2**

# Banking and Checking

# Vocabulary

*Study the terms and definitions below.*

## Checking Accounts

authorized .............................. approved; official; correct

check ...................................... a written form directing a bank to deduct money from a checking account to make a payment

checking account ................. a bank account in which money is deposited and is withdrawn by using forms called *checks*

currency ............................... actual money, as opposed to something that represents money such as a check

deposit .................................. money put into an account

deposit slip ........................... a slip of paper to show how much money is put into an account; also used by the bank to make sure the deposit is in the correct account

endorse ................................. to sign your name to the back of a check when depositing or cashing it

## Accounting and Balancing

balance .................................. the amount of money available in an account

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**Go Figure...**

bank statement ..................... a statement sent by the bank showing all activity in an account since the last bank statement

cancelled checks ................... checks that have been paid by the bank and subtracted from an account

check register ...................... a record of checks written and the amount available in a checking account

ending balance ...................... the recorded balance of an account after all checks have been paid or cleared by the bank

entries ........:........................ information entered into a book or booklet

outstanding checks .............. checks written but not returned to the bank

overdrawn ........................... an account that doesn't have enough deposits to cover checks written against it

reconcile ............................. to match balances and activities recorded in a checkbook register with the bank statement

service charge ..................... money charged to an account for bank services

withdrawal ........................... money taken from a bank account

# Banking and Checking

## Saving Accounts

**compound interest** .............. interest that is paid on both principal and interest earned

**interest on savings** ............... money that is paid for the use of your money

**interest rate** ......................... an amount expressed as a percent and paid on an account

**passbook** ............................. a booklet used to record activities in a savings account

**principal** .............................. the amount of money in an account that earns interest

**savings account** ................... an account established to save money

**simple interest** ..................... interest paid only on the original principal

**transaction** .......................... the act of conducting a business agreement or exchange

## Borrowing

**credit references** .................. businesses or people who can show a customer's payment history

**earnings statement** .............. the check stub attached to your paycheck listing gross pay, deductions, and net pay

**finance** ................................ to loan

31
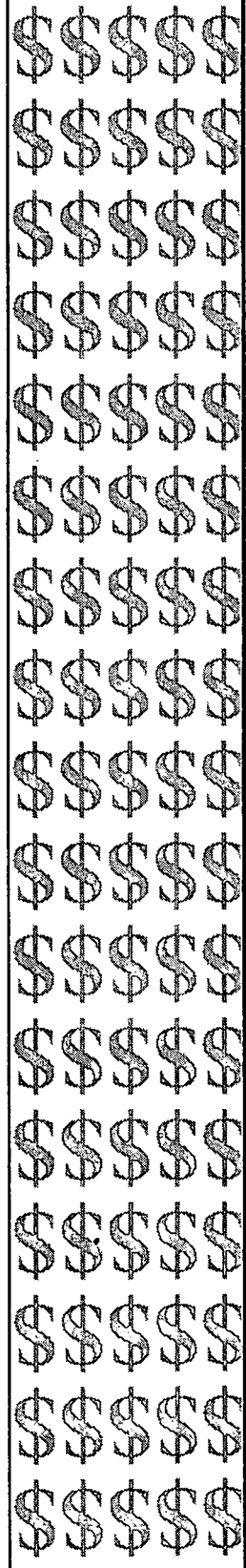
**Go Figure...**
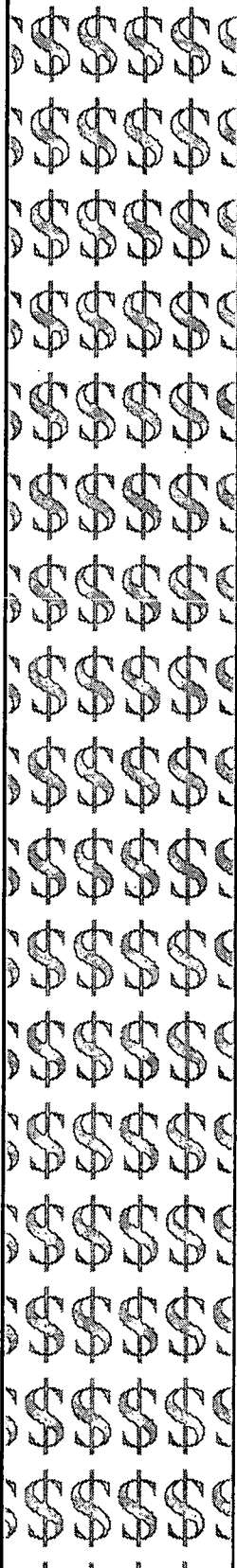
finance charge ..................... the cost of borrowing money expressed in a dollar amount

fixed rate ............................ a rate of interest that does not change

installment loan .................... a loan that is repaid in equal payments over a fixed period of time

interest ................................ the rate paid the lender for the use of the money

lender ................................. institution lending the money; often the lender is a bank

loan application .................... a form filled out by a customer to borrow money

monthly payments ............... a payment due on a loan to the lender once a month for a specified number of months

terms .................................. conditions upon which a loan is granted, including length of time

total amount ........................ the amount borrowed, or *principal*, plus interest on a loan

# Who Needs Money When We've Got Checks?!

## Checking Accounts

Angela Gibson graduated from NYC Institute of Art and has been working as a fashion designer for three years. Her career keeps her very busy, leaving little time for the little things in life—little things like managing her **checking account**. A *checking account* is a bank account into which money is deposited and is withdrawn by using forms called *checks*. It's hard enough for Angela to make sure that she writes and mails the checks to pay her bills on time. A *check* is a written order directing a bank to deduct money from a *checking account* to make a payment. She simply does not take the time to record checks and make sure that her totals match the bank's totals. Angela tries to keep her checking balance in her head. However, Angela's mental record does not always match that of the bank's. The bank always seems to have a smaller balance than her mental checking balance! Obviously, Angela needs a better system to account for her money.
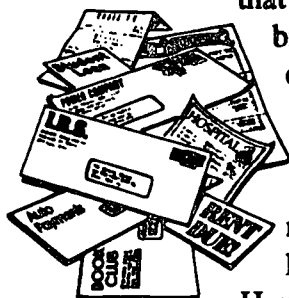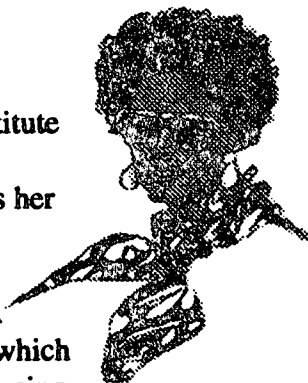
Before Angela opened a checking account, she paid all of her bills in cash and in person. Back then, her budget was small, and she had very few bills. As her income grew, so did her expenses. Paying all of her bills in person became tiresome and time consuming. She needed to save time and energy, and so she decided to open a checking account so that she could write checks to pay her bills and send her checks by mail. A checking account was also a good way to keep track of how she was spending her money (budgeting, tax records, etc.).

**Go Figure...**

Angela still remembers opening her first account and all of the steps she had to go through. First, she had to decide what bank to use. That was easy since she had decided to use the same bank where her parents kept their checking account. To open a checking account, she had to give the bank some personal information—name and address, place of employment, Social Security number, and a deposit, or money she put into her checking account. She also had to fill out a *signature card*. The signature card gives the bank a record of the customer's name, address, and the authorized, or official, signature.

To put the money into her account, Angela had to fill out a **deposit slip**. A deposit slip is a slip of paper that shows the amount of money put into an account. The bank also uses a deposit slip to make sure that the money is deposited in the correct account. Angela had to record how much cash she was depositing, the amounts of the checks she was depositing, and then the total amount of the cash and the checks being deposited.

| CHECKING ACCOUNT DEPOSIT SLIP | CASH | CURRENCY ①60 00 | |
|---|---|---|---|
| | | COIN | 16-66 |
| | | List Checks Singly | 1220 |
| | ②16-66 ③35 00 | | |
| ④ DATE *April 18* 19 _94_ | TOTAL FROM OTHER SIDE | ⑤ 95 00 | USE OTHER SIDE FOR ADDITIONAL LISTING |
| | TOTAL | | |
| SIGN HERE FOR CASH RECEIVED | LESS CASH RECEIVED | ⑥ | |
| | NET DEPOSIT ⑦95 00 | BE SURE EACH ITEM IS PROPERLY ENDORSED |

**Citizens State Bank**

|:1220 0667: 31430551 8||

1 Amount of currency deposited   4 Date the deposit is made   7 The total deposit amount less cash
2 Bank number of check deposited   5 Total amount deposited
3 Amount of the check deposited   6 Amount of cash requested

**You Try!**

## Banking and Checking

Use the deposit slip shown above to answer the following questions.

1. How much currency was deposited? _____

2. What is the bank number of the check deposited?

   _____

3. What is the amount of the check deposited? _____

4. What is the date the deposit was made? _____

5. What is the total amount deposited? _____

6. In which space would Angela write the amount of cash that she wanted back?

   _____

7. Which space should Angela use to show the total deposit less cash received?

   _____

8. What addition must Angela make to the deposit slip if she wants to get cash back?

   _____

After making her deposit, Angela was ready to write her first check. She remembers it as an exciting and fun time. She wasn't able to use the checks that she chose right away because they had to be printed. They were mailed to her about a week later. However, the bank gave Angela some temporary checks that were without the personal information usually printed on checks—name and address, phone number, account

number, the name and address of the bank, and consecutive numbers. Her new checks would look more like the one filled out below.



Angela had to remember the following six steps when writing a check.

**Step 1:** Write the date.

**Step 2:** Write the name of the person or organization to whom payment will be made.

**Step 3:** Write the amount of the check as a numeral.

**Step 4:** Write the amount of the check in words with cents expressed as a fraction of a dollar and finish with a line to the word *dollars*.

**Step 5:** Make a note on the memo line to indicate its purpose.

**Step 6:** **Endorse** the check.

## Banking and Checking

**You Try!**

Using the picture of the check on the previous page as a model, follow the directions below.

1. Write today's date as it should be written.

   _____

2. Write the name of the classmate nearest to you, as though you were writing her or him a check.

   _____

3. Write the amount of $47.28 in words.

   _____

4. Sign your name as you would sign a check—using your authorized signature.

   _____

5. If you could write a check to anyone you wanted to, to whom would you write the check and why?

   _____

   _____

6. What would you write on the memo line? _____

   _____

*Time for some practice!*

**$** 3.01

# Checks and Check Registers

*Complete Alex's checks in problems 1, 2, and 3. Update his check register on page 41 as each check is completed. Include Alex's deposit and update his bank balance. Follow the directions in each of the problems.*

1.  Alex wrote a check in the amount of $12.50 to Clearview Discount Store for school supplies on August 27, 1994. His account balance before the purchase was $108.15.

> ```
> 101
> _____ 19 _____
>                                           16-66
>                                           1220
> PAY TO THE
> ORDER OF_____ $_____
>
> _____ DOLLARS
> Citizens State Bank
>
> MEMO _____        _____
> ||1220  0667 || 314305519 ||
> ```

2.  Alex paid $8.00 for tickets to the first home football game to his school on September 1, 1994. (Use your school name on the check below.)

> ```
> 102
> _____ 19 _____
>                                           16-66
>                                           1220
> PAY TO THE
> ORDER OF_____ $_____
>
> _____ DOLLARS
> Citizens State Bank
>
> MEMO _____        _____
> ||1220  0667 || 314305519 ||
> ```

126

## Banking and Checking

$\$$

3.  Complete the check to show that Alex bought a pair of boots for $52.65 from the Western Boot Store on September 18, 1994.

```
                                                            103
                                           _____ 19 ____

                                                    16-66
                                                    1220

    PAY TO THE
    ORDER OF_____ $_____

    _____ DOLLARS

    Citizens State Bank
        Sears Plaza    Chicago, Illinois 76220

    MEMO _____    _____

    |:1220  0667 :| 314305519 ||
```

4.  Complete the deposit slip below for the checks on the next page that Alex received. Then record the transaction as a deposit on Alex's check register on page 41. Update Alex's balance.

```
    CHECKING ACCOUNT DEPOSIT SLIP        CASH | CURRENCY |   .   |
                                              |   COIN   |       |
                                         List Checks Singly |    |
                                                    |       |
                                                    |       |            16-66
                                                    |       |            1220
    DATE_____ 19_____    TOTAL FROM |       |   USE OTHER SIDE FOR
                                         OTHER SIDE |       |   ADDITIONAL LISTING
                                              TOTAL |       |
    _____       LESS CASH RECEIVED |
         SIGN HERE FOR CASH RECEIVED      NET DEPOSIT |      |   BE SURE EACH ITEM IS
                                                                PROPERLY ENDORSED

    Citizens State Bank
        Sears Plaza    Chicago, Illinois 2002

    |:1220   0667:| 314305519 ||
```

$

3.01

---

**Chez**
**André**

11/1 19 94

PAY TO THE
ORDER OF ___Alex Carter_____ $ 257.35

Two hundred fifty-seven and $^{35}/_{00}$ _____ DOLLARS

**Grand Money State Bank**
Everywhere, USA 00000

_Andre Fontenot_

123:3456 I 0987 II 4567

---

Robert M. Smith
1234 S. Main
Anywhere, USA

11/9 19 94

PAY TO THE
ORDER OF ___Alex Carter_____ $ 53.00

_Fifty-three and_ _____ 00/100 DOLLARS

**Old Money State Bank**
Somewhere, USA 00000

FOR _____ _Robert M. Smith_

876:3456 I 2765 II 0987

---

The
**Fitness**
**Place**

11/4 19 94

PAY TO THE
ORDER OF ___Alex Carter_____ $ 125.88

One hundred twenty-five and $^{88}/_{00}$ _____ DOLLARS

**New Money State Bank**
Anywhere, USA 00000

_Joe Bossman_

567:4321 I 9182 II 6732

---

40

# Banking and Checking

$

5. Write all the transactions for Alex's bank account in his register below.
Find his new balance.

| CHECK NO | DATE | CHECKS ISSUED TO OR DESCRIPTION OF DEPOSIT | (-) AMOUNT OF CHECK | T | (+) AMOUNT OF DEPOSIT | BALANCE | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

129

**3.01**

6. Complete the deposit slip below for James C. Morrison if he is depositing four checks of $22.50, $155.54, $36.55, and $210.54. He wants $125 cash back from this June 21, 1994 transaction.

| CHECKING ACCOUNT DEPOSIT SLIP | | CASH | CURRENCY | | | |
|---|---|---|---|---|---|---|
| | | | COIN | | | |
| | | List Checks Singly | | | | |
| | | | | | | 16-66 |
| | | | | | | 1220 |
| DATE_____ 19_____ | | TOTAL FROM OTHER SIDE | | | | USE OTHER SIDE FOR ADDITIONAL LISTING |
| | | TOTAL | | | | |
| | | LESS CASH RECEIVED | | | | |
| SIGN HERE FOR CASH RECEIVED | | NET DEPOSIT | | | | BE SURE EACH ITEM IS PROPERLY ENDORSED |

# Citizens State Bank
Sears Plaza    Chicago, Illinois 20002

|:1220    0667:| 314305519||

7. On July 2, 1994 James C. Morrison wrote a check for $52.63 to K.P. Carter for tools. Complete the check below.

788

_____ 19 _____

16-66
1220

PAY TO THE
ORDER OF_____ $_____

_____ DOLLARS

# Citizens State Bank
Sears Plaza    Chicago, Illinois 20020

MEMO _____    _____

|:1220   0667 :| 314305519 ||

# What Do You Mean I Have No Money in My Checking Account?!...I Still Have Checks!

## Accounting and Balancing

The first few months after opening a checking account, Angela thought she had more in her checking account that she actually did. Using her memory to keep track of the checks she had written did not work. Angela learned to record each check in her **check register**—a small booklet used to keep track of the **balance**, or the amount of money available in an account. The balance can be figured by subtracting the amount of **withdrawals** and checks written from deposits. Angela knew that her checking account must contain as much money as the amount of the checks that she wrote to avoid having her account **overdrawn**—having written more checks against the account than there is money in the account. To avoid overdrawing on an account, she developed the habit of recording the check number and the amount of the check in her check register each time she wrote a check.
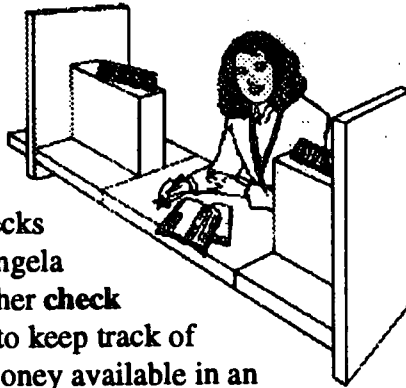
The check register is a little booklet of columns and rows. The columns have headings. Different types of **entries** are recorded under each.

**Go Figure...**

| CHECK NO | DATE | CHECKS ISSUED TO OR DESCRIPTION OF DEPOSIT | (-) AMOUNT OF CHECK | √ T | (+) AMOUNT OF DEPOSIT | BALANCE |
|---|---|---|---|---|---|---|
| | | | | | | 201 00 |
| 101 | 4/18 | Will U Checkit | 29 33 | | | 171 67 |
| | | for blouse | | | | |
| ~ | 4/19 | Deposit (bonus check) | ~ | — | 90 00 | 261 67 |
| | | | | | | |
| | | | | | | |

1- Number of the check written  
2- Date the check was written  
3- Person/Company receiving check  
4- Reason for the check  
5- Amount of the check  
6- Amount of deposit  
7- Beginning balance  
8- New balance minus check written  
9- New balance (running balance)

**You Try!**

Using the check register shown above, answer the following questions.

1. What is the number of the check recorded? _____

2. When was the check written? _____

3. To whom was the check written? _____

4. What was purchased with this check? _____

5. What is the amount of the check? _____

6. What is the date and the amount of the deposit? _____

7. What is the beginning balance of the account? _____

8. What is the current balance after the check has

    been subtracted? _____

9. What is the new balance of the account after the

    deposit was made? _____

# Banking and Checking

Having gotten a good start on her checkbook recording, Angela remembered receiving some mail from her bank. It was a **bank statement**—a statement sent by the bank showing all transactions in an account since the last bank statement. Along with the statement, the bank sent the **cancelled checks**—the checks that were paid by the bank and subtracted from the account.

## Citizens State Bank
Sears Plaza, Chicago, Illinois 20002

Angela B. Gibson
#16 Melrose Place
7345 N. Main
Chicago, IL 20002

Account #: 314305519
Closing Date: ❶ 5/26/94
Beginning Balance: $397.67 ❷

### CHECKS

| CHECK NUMBER | DATE PAID | AMOUNT | CHECK NUMBER | DATE PAID | AMOUNT |
|---|---|---|---|---|---|
| 221 | 5/6/94 | 52.98 | | | |
| 222 | 5/7/94 | 20.20 | | | |
| 223 | 5/10/94 | 6.92 | | | |
| 224 | 5/13/94 | 10.23 ❸ | | | |
| 225 | 5/13/94 | 35.00 | | | |
| 226 | 5/18/94 | 29.12 | | | |
| 228 | 5/21/94 | 45.90 | | | |

### DEPOSITS

| DATE | AMOUNT | DATE | AMOUNT |
|---|---|---|---|
| ❹ 5/26/94 | 225.98 | | |

### OTHER CHARGES

| CHARGE | DATE | AMOUNT |
|---|---|---|
| ❺ Service Charge | 5/26/94 | 6.00 |
| ❻ New Checks | 5/26/94 | 12.00 |

Ending Balance: ❼ $405.30

The checks were stamped with the word *PAID* and the name of the bank. The statement showed her checking account number and the *closing date*, or date when the bank stopped recording for that time period (#1). The statement also showed the beginning balance, or the amount Angela had in her account before any checks were written or money was deposited (#2). Other information on the statement included the number and

Go Figure...

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**Go Figure...**

the amount of each check that had been paid and the date that each was paid by the bank (#3). The date and amount of the deposit was recorded (#4). Also shown was the **ending balance** of the checking account—the balance after all the transactions made during the recording period had been added or subtracted (#7). Angela also noticed the bank's **service charge** (#5) for handling the account and a charge for the cost of printing her checks (#6).

What was most important to Angela was the *ending balance.* Somehow, her check register had shown a much larger balance than the bank statement. Angela couldn't figure out why the balances were so different. She needed to *balance,* or **reconcile,** her account. To reconcile her account Angela needed to make the balance in her check register match the balance in her bank statement. In the chart on the next page are the 10 steps that Angela followed to balance her account

Angela knew that if her checking account did not balance with the bank statement, somebody was wrong, and it usually wasn't the bank. She had to ask herself some important questions.

**Did she mark off every check that was returned?**

**Did she make any mistakes in her addition or subtraction?**

**Did she account for any *outstanding checks,* or checks that have been written but not returned by the bank?**
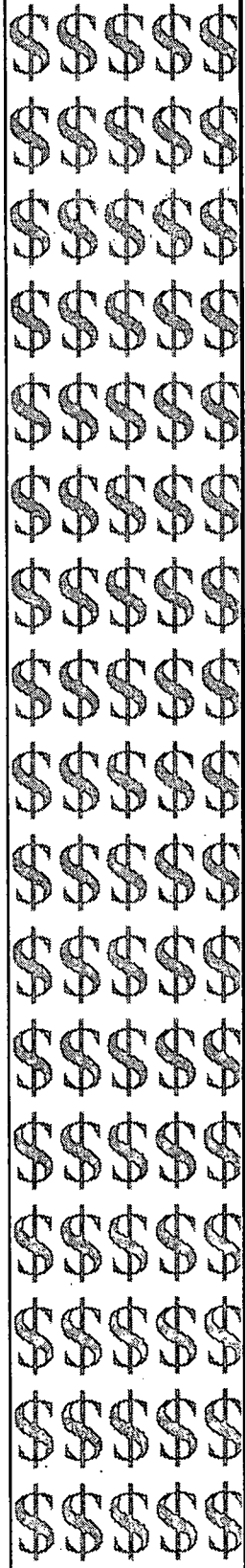
**Did she subtract the service charges from her checkbook balance?**

**Did she add all recent deposits to the ending balance on her statement?**

**Did the bank add and subtract correctly?**

**Go Figure...**

## 10 Steps to Checkbook Balancing

| 1. Update your checkbook. | Find the current balance. Add all deposits that have not been added. Subtract any checks you haven't already subtracted. Then subtract all service charges found on the bank statement. Record the updated balance |
|---|---|
| 2. Arrange the cancelled checks. | Place the cancelled checks in order by check number. |
| 3. Compare. | Compare the cancelled checks to the ones listed in the statement. Check off each one on the statement. |
| 4. List outstanding checks. | List all of the checks written in the check register, that have not been cancelled at the bank. These are called outstanding checks. Add them together. |
| 5. Compare deposits. | Compare the deposits listed on the bank statement with the ones listed in the check register. Check off each deposit on the statement. |
| 6. List outstanding deposits. | List all of the deposits from the check register that do not appear on the statement. Add them together. |
| 7. Record the balance. | Write down the ending balance from the bank statement. |
| 8. Add deposits. | Add the total of all outstanding deposits to the ending balance of the bank statement. |
| 9. Subtract total of checks. | Subtract the total of all outstanding checks from the previous total. |
| 10. Check the answer. | The final answer should match the updated checkbook balance. If it does not, either you or the bank has made a mistake. |

If she had completed all the steps in the checklist and still found a difference in the two balances, Angela planned to ask for help from the bank. She was going to take her statement, cancelled checks, and checkbook register with her and have a teller or bank officer help find the correct balance.

*Time for some practice!*

**$ 3.02**

# Bank Statements

*Based on the information given, reconcile the checkbook balance with the bank statement balance.*

## Lottamoney State Bank
Plaza One, Anywhere, USA 20002

John Doe
#17 Main St. Apts.
7345 N. Main
Anywhere, US 20002

Account #: 314305519
Closing Date: 5/28/94
Beginning Balance: $701.80

**CHECKS**

| CHECK NUMBER | DATE PAID | AMOUNT | CHECK NUMBER | DATE PAID | AMOUNT |
|---|---|---|---|---|---|
| 221 | 5/6/94 | 137.50 | | | |
| 223 | 5/10/94 | 54.25 | | | |
| 225 | 5/13/94 | 7.50 | | | |

**DEPOSITS**

| DATE PAID | AMOUNT | DATE PAID | AMOUNT |
|---|---|---|---|
| | | | |

**OTHER CHARGES**

| CHARGE | DATE PAID | AMOUNT |
|---|---|---|
| Service Charge | 5/28/94 | 1.35 |

Ending Balance: $501.20

1. Checkbook balance: $476.40
   Bank statement balance: $501.20
   Service charge: $1.35
   Outstanding checks: $56.45
   $37.90
   $6.85
   Deposit not credited to account: $75.05

   Adjusted bank balance $ _____

   Adjusted checkbook balance $ _____

# Banking and Checking

2. Checkbook balance:            $544.39
   Bank balance:                $714.24
   Service charge:             $1.45
   Outstanding checks:       $143.50
                                   $27.80

   Adjusted bank balance:      $ _____

   Adjusted checkbook balance:  $ _____

3. Checkbook balance:            $409.08
   Bank balance:                $520.63
   Service charge:             $1.20
   Outstanding checks:       $100.00
                                   $12.75

   Adjusted bank balance:      $ _____

   Adjusted checkbook balance:  $ _____

**Go Figure...**

# Save It for a Rainy Day

## Savings Accounts

Juan recently got a job as a carpenter and began earning money. He realizes that he shouldn't spend all of the money he earns. He will want to purchase items that require larger sums of money than he receives in one paycheck. He will need to save money from each paycheck if he is to afford such expenditures.

Realizing that it would be *unsafe* and *unprofitable* to try to save his money in a hiding place at home, Juan decides to open up a **savings account** at his bank. A *savings account* is an account that is established to save money—no checks are written on this account. The bank pays the owner of a savings account **interest on savings**. *Interest on savings* is money the bank pays for using money that has been deposited in a savings account. Different banks may offer different **interest rates** on its customers' bank accounts. The amount of money that the bank pays each month accumulates or continues to add up.

While Juan does not have a large amount of extra money every month, whatever money he puts into a savings account will increase over time from the interest the bank will pay him. The interest that will be paid to his account is a percentage of his savings.

| | DATE | INTEREST | DEPOSIT | WITH-DRAWAL | BALANCE |
|---|---|---|---|---|---|
| 18 | 04-01 | 4.87 | | | 784.15 |
| 19 | 04-12 | | 150.00 | | 934.15 |
| 20 | 05-11 | | 24.50 | | 958.65 |
| 21 | 06-03 | | | 20.00 | 938.65 |
| 22 | 07-01 | 12.37 | 62.25 | | ? |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

DEPOSITOR: Juan Rivera
ACCOUNT NO.: 08-821235-4

To open an account, Juan will first need to make a deposit. Each time he makes a deposit, it will be added to the balance of his account. The bank may provide him with deposit slips to

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## Banking and Checking

use for recording the currency and checks that he deposits.
Other banks may use a **passbook**—a small booklet used for
recording the **transactions**, interest earned, and new balances
on a savings account. When the banks use passbooks, they
sometimes call the savings account a *passbook account.*

When Juan is ready to make a withdrawal from his savings
account, unlike checking accounts, he will use either
withdrawal slips or a passbook provided by the bank. The
amount of money that he withdraws will be subtracted from
the balance of his account and then recorded in his passbook
or in a computer system that supplies a printed receipt for his
records.

### You Try!

Refer to the passbook on the previous page to answer the
question. Use the **Go Figure...** area for any calculations.

> **On July 1ˢᵗ, Juan deposited $62.25 in his
> account. The bank teller recorded the
> transaction and the interest earned
> during the past savings period. What is
> the new balance in his account?**

PREVIOUS BALANCE + INTEREST + DEPOSITS −
WITHDRAWALS = NEW BALANCE

$938.65 + $12.37 + $62.25 − 0 = NEW BALANCE

_____ = NEW BALANCE

In trying to understand his options for savings accounts, Juan
found that many different terms were used. He had to do a
little bit of reading and studying before he could make his best
informed decision. He understood that *interest* was the amount
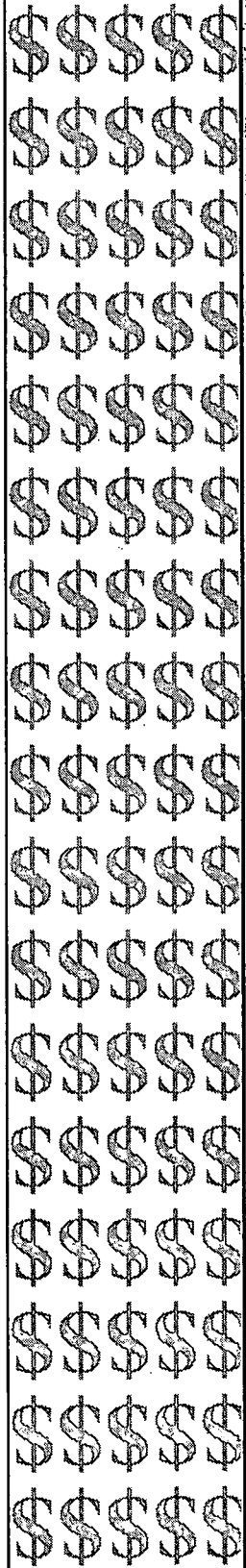
**Go Figure...**

of money that he would earn for letting the bank use his money while he saved. But *interest* was only the beginning of what he needed to know. He needed to know that the amount of money that he deposits is called the ***principal***. He understood that the *annual interest rate* is the percent of the *principal* that he would earn as interest in one year. What he thought he would be receiving would be **simple interest**, or the interest paid only on the original principal. However, what he found was that his bank would be using **compound interest**—the interest earned not only on the original principal, but also on the interest earned during previous interest periods.

Juan became a little unsure about his ability to figure the compound interest that he would earn on his account. When he inquired at the bank, he found that they used *compound interest tables* to compute compound interest quickly. The table shows the interest rates and

| Savings Account Interest | | |
|---|---|---|
| Interest Rate X Total Savings = Interest per Year | | |
| 6% X $500.00 = | | |
| .06 X $500.00 = $30.00 | | |
| Interest for the Year ÷ 12 months = Interest per month | | |
| $30.00 ÷ 12 = $2.50 Interest per month | | |

interest periods based on a $1 deposit. Juan only needed to know the total number of interest periods, and the interest rates per period that would be used by his bank.

After comparing the *simple interest* on his account with the daily *compound interest* table, Juan decided that the use of compound interest was to his advantage. The more frequently his bank compounded interest, the more interest he could earn. Many banks compound interest daily—it is computed each day and added to the account balance. Lucky for Juan, his account will earn interest from the day of the deposit to the day of withdrawal.

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## Banking and Checking

**You Try!**

Refer to the *compound interest table* to answer the following question. Use the **Go Figure...** area for any calculations.

If Juan deposited $865.84 in a savings account for 32 days, and that account pays 5.5% interest compounded daily, how much interest would be earned on the principal in his account?

| AMOUNT OF INTEREST EARNED ON $1.00 AT 5.5% COMPOUNDED DAILY, 365-DAY YEAR | | | |
|---|---|---|---|
| DAY | AMOUNT | DAY | AMOUNT |
| 21 | 1.00316 | 31 | 1.00468 |
| 22 | 1.00331 | 32 | 1.00483 |
| 23 | 1.00347 | 33 | 1.00498 |
| 24 | 1.00362 | 34 | 1.00513 |
| 25 | 1.00377 | 35 | 1.00528 |

AMOUNT = ORIGINAL PRINCIPAL X INTEREST EARNED ON $1.00

AMOUNT = $865.84 x 1.00483

AMOUNT = _____

COMPOUND INTEREST = AMOUNT − ORIGINAL PRINCIPAL

COMPOUND INTEREST = $870.02 − _____
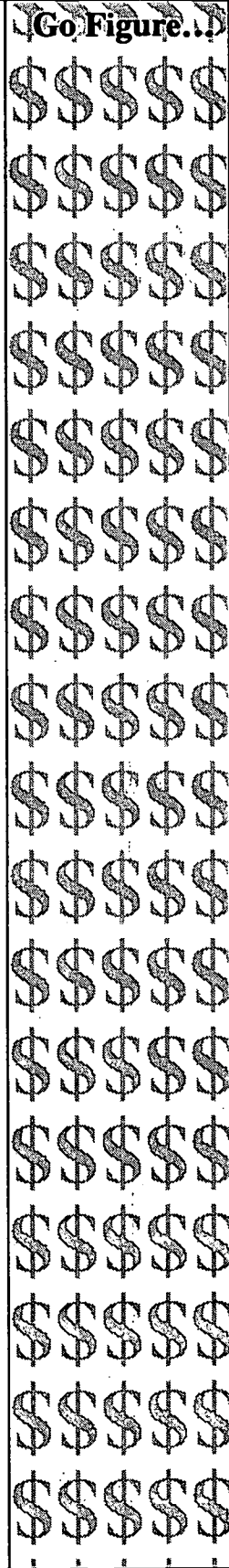
COMPOUND INTEREST = _____

*Time for some practice!*

3.03

# Compound Interest

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

COMPOUND INTEREST = PRINCIPAL x RATE ÷ No. OF INTEREST PERIODS PER YEAR

| | Principal | Rate | First Quarter Interest | Principal at End of First Quarter | Second Quarter Interest | Principal at End of Second Quarter |
|---|---|---|---|---|---|---|
| 1. | $800 | 6% | $ | $ 812 | $ | $ |
| 2. | $2000 | 8% | $ | $ | $ | $ |
| 3. | $22,000 | 10% | $ | $ | $ | $ |

*Use the table below to solve the following problems.*

| Compound Interest Table for $1 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Interest Periods | 1½% | 2% | 6% | 7% | 8% | 9% | 10% |
| Annual 1 | 1.015000 | 1.020000 | 1.060000 | 1.070000 | 1.080000 | 1.090000 | 1.100000 |
| 2 | 1.030225 | 1.040400 | 1.123600 | 1.144900 | 1.166400 | 1.188100 | 1.210000 |
| 3 | 1.045678 | 1.060208 | 1.191016 | 1.225043 | 1.259712 | 1.295029 | 1.331000 |
| 4 | 1.061364 | 1.082432 | 1.262477 | 1.310796 | 1.360489 | 1.411582 | 1.464100 |
| 5 | 1.077284 | 1.104081 | 1.338226 | 1.402552 | 1.469328 | 1.538624 | 1.610510 |
| 6 | 1.093443 | 1.126162 | 1.418519 | 1.500730 | 1.586874 | 1.677100 | 1.771561 |
| 7 | 1.109845 | 1.148686 | 1.503630 | 1.605781 | 1.713824 | 1.828039 | 1.948717 |
| 8 | 1.126493 | 1.171659 | 1.593848 | 1.718186 | 1.850930 | 1.992563 | 2.143589 |
| 9 | 1.143390 | 1.195093 | 1.689479 | 1.838459 | 1.999005 | 2.171893 | 2.357948 |
| 10 | 1.160540 | 1.218994 | 1.790848 | 1.967151 | 2.158925 | 2.367364 | 2.593742 |
| 11 | 1.177949 | 1.243374 | 1.898299 | 2.104852 | 2.331639 | 2.580426 | 2.853117 |
| 12 | 1.195618 | 1.268242 | 2.012197 | 2.252192 | 2.518170 | 2.812665 | 3.138428 |
| Daily 30 | | | 1.005012 | 1.005850 | 1.006688 | 1.007527 | 1.008367 |
| 90 | | | 1.015112 | 1.017652 | 1.020199 | 1.022752 | 1.025312 |
| 180 | | | 1.030452 | 1.035616 | 1.040806 | 1.046022 | 1.051264 |
| 365 | | | 1.062716 | 1.073544 | 1.084482 | 1.095530 | 1.106691 |

## Banking and Checking

$

4.  $8000 is deposited in an account for 8 years at 8% interest compounded annually. What amount is in the account after 8 years?

    PRINCIPAL  x  VALUE FROM TABLE  =  AMOUNT AFTER 8 YEARS

    $8000  x  1.850930 = _____

5.  $12,000 is deposited in an account for 7 years at 9% interest compounded annually. What amount will be in the account after 7 years?

    _____
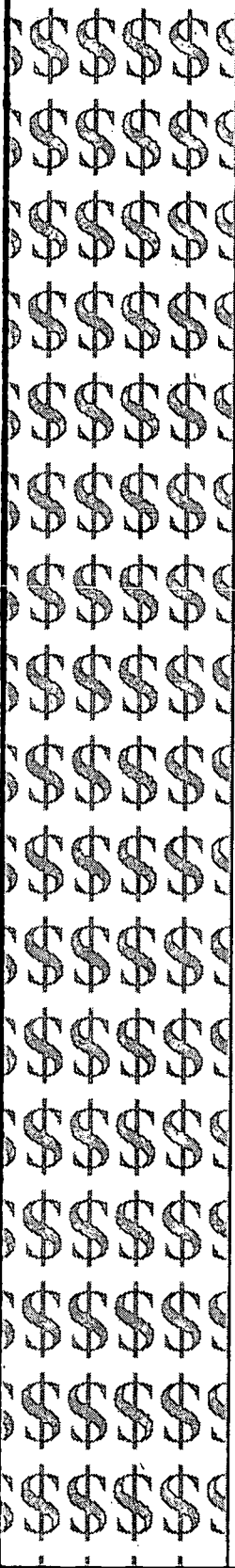
# Gotta' Have it NOW!

## Borrowing

With his new savings account in place, Juan is on his way to becoming an independent young man. He's feeling good about his job and saving money. Now he would really like to have some new furniture in his apartment! He wants a new look to go with his new job.

Juan began shopping around to find some attractive, high quality furniture for his apartment. He found what he wanted, but he also found that even though he had some savings, it was not enough money to purchase the furniture. He wondered what he could do. Juan decided that since the people at his bank had been so helpful, he would ask them what his options were.

Juan found out that the bank might **finance** his purchase, or loan him the money he wanted. To apply for a loan, Juan had to fill out a **loan application**. On the loan application, Juan will provide personal identification such as a driver's license, Social Security number, a draft card, or a birth certificate. Juan will have to give a permanent address—one that is not in a hotel, in care of someone else, or at a post office box. Juan also will need to list the jobs that he has had and how long he held them. This information will tell the loan officers if Juan has shown the ability to hold a steady job. He also had to present proof of his income in the form of **earnings statements** or tax returns.

An officer explained to him that his credit would then be reviewed to see if Juan qualified for a loan. The bank would check on Juan's place of employment and his income. It would check his credit rating or whether Juan had ever failed to make payments on time on any past debts. The bank would also check Juan's **credit references**—businesses and people who could show that Juan had paid his bills regularly and promptly.

**Go Figure...**
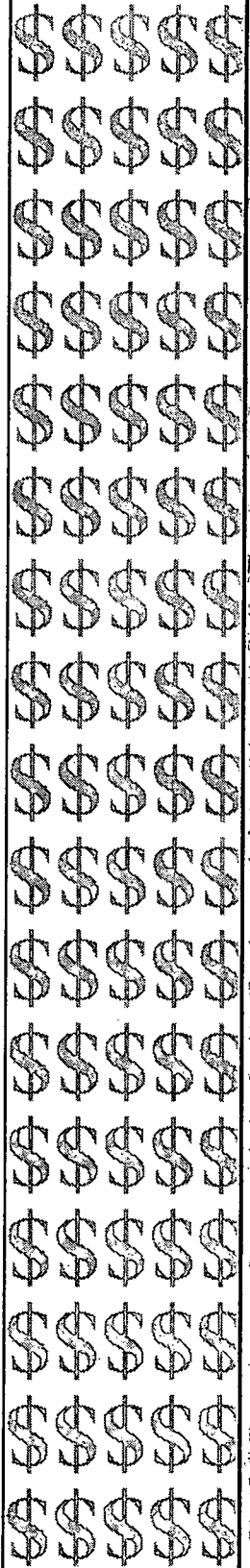
## Citizens' State Bank
### Consumer Loan Application

**CREDIT REQUEST**

**A** Purpose for the Loan: _____

Amount Requested: $_____ Length of Time: _____ Mos ☐ Yrs. ☐

Marital Status: ☐ Married ☐ Single ☐ Widowed ☐ Divorced

Applying: Individually ☐ Jointly ☐ (If applying jointly, each applicant must complete a separate application)

**PERSONAL INFORMATION**

**B**

| Last Name | | First Name | | Middle/Maiden Name |
|---|---|---|---|---|

| Current Address | Street | | Apt. No. | Yrs/Mos Own ☐ Rent ☐ |
|---|---|---|---|---|

| City | State | Zip Code |
|---|---|---|

| Previous Address (If less than 3 yrs at present address) | Street | Apt. No. | Yrs/Mos |
|---|---|---|---|

| City | State | Zip Code | Date of Birth |
|---|---|---|---|

| Social Security Number | Driver's License No. |
|---|---|

Home Phone No.
☐ Morning ☐ Afternoon ☐ Evening

List Dependents Other Than Self or Spouse
☐ Home ☐ Work

Best Time to Call

Best Place to Call

| Nearest Relative/Friend not living with you | Relationship | Phone No. |
|---|---|---|

| Address | Street | City | State | Zip Code |
|---|---|---|---|---|

**EMPLOYMENT**

**C**

| Present Employer | | Position | | Work Phone No. |
|---|---|---|---|---|

| Employer's Address | City | State | Zip Code | Yrs/Mos (If less than 3 yrs. complete Previous Employer.) |
|---|---|---|---|---|

| Previous Employer | | Position | | Work Phone No. |
|---|---|---|---|---|

| Employer's Address | City | State | Zip Code | Yrs/Mos |
|---|---|---|---|---|

**INCOME**

**D**

| Monthly Gross Salary and Wages | $ |
|---|---|
| Dividends and Interest | $ |
| Other Income (Describe) | $ |
| Monthly Income | $ |

**BANKING**

**E**

| Type of Account | Financial Institution | Account # | Balance |
|---|---|---|---|
| Checking ☐ | | | |
| Savings ☐ | | | |
| Other (Specify) ☐ | | | |

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**Go Figure...**

Juan would also need to have a checking or savings account to have a good credit rating.

A loan officer explained to Juan that if his loan was approved, then he would be asked to sign a contract and to pay a loan fee. By signing the contract, Juan would agree to repay the **lender**, or the institution lending him the money, within a specified period of time at a specified rate.

**You Try!**

Using the sample loan application on the previous page, answer the following questions. Use the **Go Figure...** area for any calculations.

1. See Section A. Wendy want to borrow $2400 for two years. What will she write on the line before the word *months*?

   _____

2. See Section B. Jabari has lived at his current address for 30 months. Will he have to fill out any information under *previous address*?

   _____

3. See Section C. Tim has been working at the cycle shop for 26 months. What will he complete on the third line?

   _____

4. Tierra is a waitress. She works 140 hours a month and earns $4.50 an hour. What would she put on line 1 in Section D?

   _____

# Banking and Checking

5. Cindy owns some shares in a company. She is paid $120 a year in *dividends* from this investment. She also earns $18.75 a month on a savings account of $7500. What should she put on line 2 in Section D?

_____

6. Joakim has a job as a waiter and works 160 hours a month. If he earns $4.25 per hour, what would he put on line 1 in Section D?

_____

7. Joakim's tips average $9.50 an hour. What should he put on line 3 in Section D? What should he put on line 4 in Section D?

_____

8. Kayla has a savings account at New Nations Bank. Her account number is 3698-852147. Her balance is $943.06. How would she fill out the second line in Section E?

_____

When Juan's application and references have been reviewed and approved, Juan will need to meet with the loan officer and review the **terms** of his contract. He will have to sign his name to the contract promising to repay the loan in the manner stated on the contract.

Juan was glad to know that the bank found him to be a credit-worthy individual and that he would be able to get the loan from the bank. He understood that the bank did not just give people money without a charge. He would have to pay **interest** on his loan from the bank. Much like the bank pays him interest to keep his money in the bank, Juan would have to pay

147

**Go Figure...**
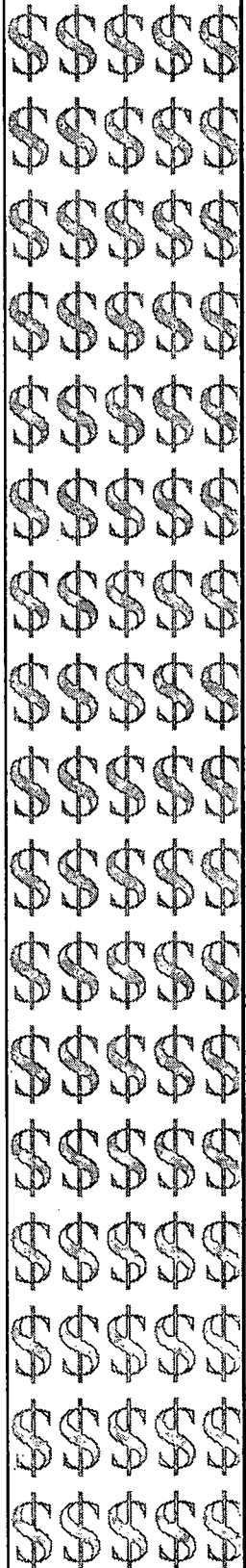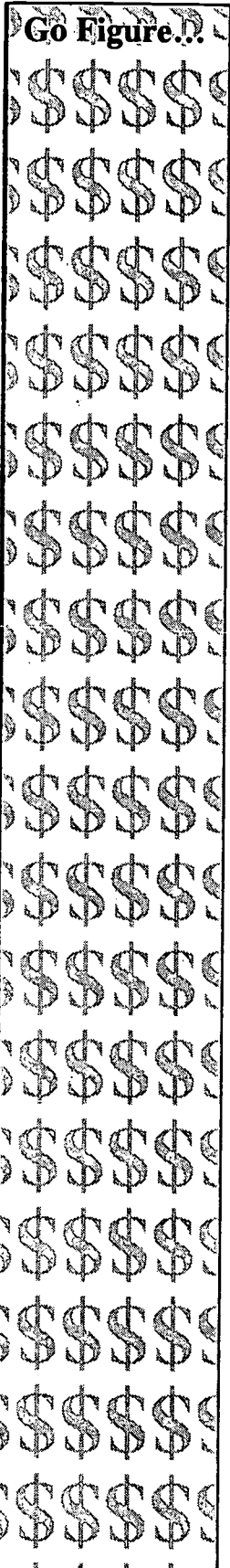
interest on the money that he was borrowing. Interest is expressed as a percentage rate. The actual dollar amount paid for borrowing money is called a *finance charge*. Finance charges also include fees for late payments.
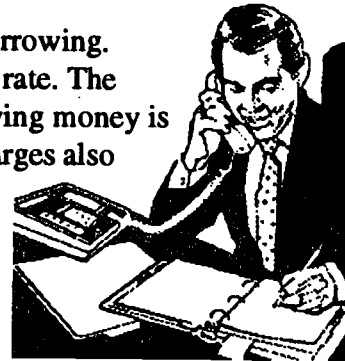
It was a good thing that Juan had learned about interest when he opened his savings account. Juan had to do some very careful listening because the loan officer used banking terms freely. The officer explained to him that the bank was not making a *single payment loan*—one that is repaid with one payment after a specified period of time. The bank was making an **installment loan**, or a loan that is repaid in equal payments over a fixed period of time. This would be better for Juan since he is newly employed and may not be able to repay the loan in one lump sum. Juan will be able to repay his loan of $1500 in several **monthly payments**, or installments.

The loan officer told Juan that the **total amount** to be repaid on his loan would be greater than the amount he borrowed. The *total amount* would be the *principal* plus the *interest owed*. The *term*, or length of time for which the loan is granted, was for two years. The *interest rate*—the rate at which interest is accumulated—was going to be a **fixed rate**, or unchanging rate, of 14%.

**You Try!**

Use the **Go Figure...** area for your calculations.

> **Knowing the *principal* of Juan's loan and the *term* of his loan, calculate the *total amount* of his loan.**

## Banking and Checking

INTEREST OWED = PRINCIPAL x RATE x TIME

INTEREST OWED = $1500 x 14% x 2 YEARS

INTEREST OWED = $1500 x .14 x 2

INTEREST OWED = _____


TOTAL AMOUNT = PRINCIPAL + INTEREST OWED

TOTAL AMOUNT = $420 + $1500

TOTAL AMOUNT = _____


**Juan could also determine the amount of his monthly installment payments by dividing his *total amount* by the number of payments of the loan.**


MONTHLY INSTALLMENT PAYMENT = TOTAL AMOUNT ÷ NUMBER OF PAYMENTS

MONTHLY INSTALLMENT PAYMENT = $1920 ÷ 24

MONTHLY INSTALLMENT PAYMENT = _____


After signing his name in agreement with the contract, Juan left the bank with his check for $1500, happily planning all the way to the furniture store.

*Time for some practice!*
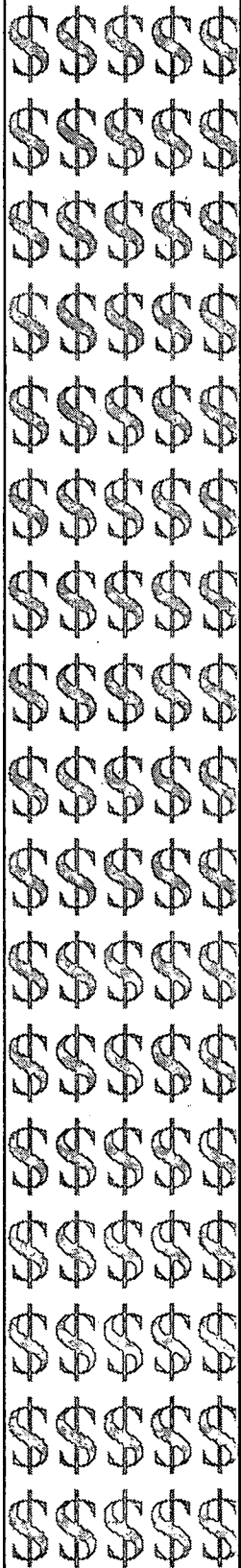
3.04

# Monthly Payment and Interest on a Loan

*Solve the problems below. Write the correct answer on each line in the chart. Round to the nearest cent.*

INTEREST OWED = AMOUNT BORROWED x RATE OF INTEREST x TIME (IN YEARS)

TOTAL AMOUNT = AMOUNT BORROWED + INTEREST OWED

MONTHLY PAYMENT = TOTAL AMOUNT + NO. OF MONTHS

| | Amount Borrowed | Interest Rate | No. of Months | Interest Charged | Total Amount | Monthly Payment |
|---|---|---|---|---|---|---|
| 1. | $5000 | 12% | 18 | _____ | _____ | _____ |
| 2. | $2500 | 13% | 12 | _____ | _____ | _____ |
| 3. | $3000 | 12.5% | 18 | _____ | _____ | _____ |
| 4. | $7000 | 14% | 24 | _____ | _____ | _____ |
| 5. | $8251 | 21% | 30 | _____ | _____ | _____ |

3.04

# Interest on Loans

*Solve the problems below. Write the correct answer on each line.*

1. What are the total interest charges, if the total amount of the payback for a loan is $7824.96 and the amount borrowed is $7200?

   _____

| Amount Borrowed | Monthly Payment | No. of Payments | Total Amount | Total Interest Charged |
|---|---|---|---|---|
| 2. $3250 | $200.46 | 18 | _____ | _____ |
| 3. $925 | _____ | 24 | $1258.08 | _____ |
| 4. $4335 | $144.50 | 36 | _____ | _____ |
| 5. _____ | _____ | 12 | $2880 | $480 |

**3.04**

# Interest and Monthly Payment on Loans

*Solve the problems below. Write the correct answer on each line.*

INTEREST OWED = AMOUNT BORROWED × RATE OF INTEREST × TIME (IN YRS)

TOTAL AMOUNT = AMOUNT BORROWED + INTEREST OWED

MONTHLY PAYMENT = TOTAL AMOUNT ÷ NO. OF MONTHS

1. Find the amount of interest and the monthly payment, if $4000 is borrowed at 13% for 24 months.

   **Principal**          **Interest**          **Monthly Payment**

   $4000          _____          _____

2. What is the monthly payment if $5000 is borrowed at a rate of 12.5% for 18 months?

   _____

3. Find the total amount of a loan if $20,000 is borrowed at a rate 14% for 48 months. Write the correct answers in the chart below.

| Amount Borrowed | No. of Months | Total Amount | Monthly Payment |
|---|---|---|---|
| $20,000 | 48 | _____ | _____ |

# Banking and Checking

4. Find the interest paid on a loan if $3000 is borrowed at 13.5% for 30 months. Complete the chart.

| Amount Borrowed | No. of Months | Total Amount | Monthly Payment |
|---|---|---|---|
| $3000 | 30 | _____ | _____ |

5. Find the total amount of payback and the total interest charged on a loan of $12,000 at 21% for 12 months.

total interest _____

total amount _____

# Buying and Selling

# Buying and Selling

## Vocabulary

*Study the terms and definitions below.*

### Profits in Selling

**buying expenses** .................. what the retailer pays to buy merchandise and get it delivered to his store

**consumer** ............................ the person who buys a product

**cost** .................................... the retailer's invoice price of an item plus buying expenses

**gross profit** ........................ the selling price of an item minus the *cost*; also called *markup*

**invoice price** ...................... the price that the retailer pays for merchandise

**markup** ............................... the dollar amount the retailer adds to the cost of an item to get the selling price; also called *gross profit*

**net profit** ........................... the gross profit minus the operating expenses

**operating expenses** ............. all of the expenses needed to run a business—salaries, rent, utilities, taxes, insurance; also called *overhead expenses*

**retailer** ............................... person selling merchandise to the consumer
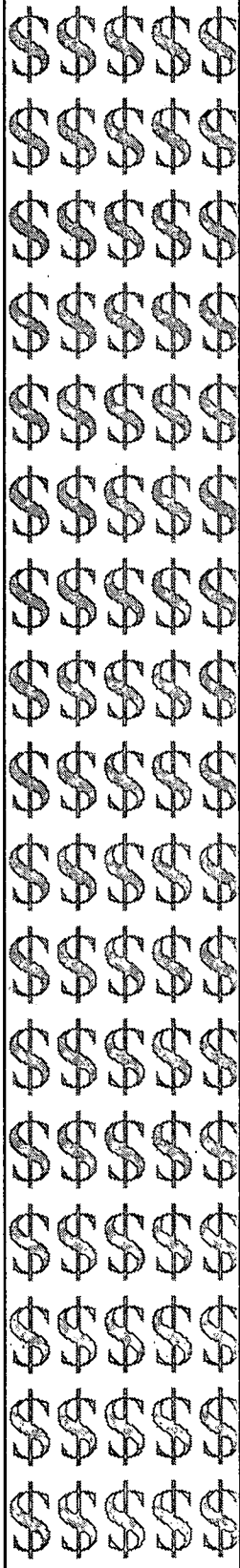
## Go Figure...

selling price ........................ the price at which a product is offered to consumers; also called *retail price*

### Best Buys

best buy .............................. the item or product that has the lowest price per unit

discount .............................. the amount of money that is saved by purchasing a product at the sale price; also called *markdown*

discount rate ....................... the markdown or discount of an item expressed as a percentage or fraction of its regular selling price

excise tax ............................ a federal tax placed on certain commodities such as tobacco and spirits

markdown ............................ the difference between the regular selling price and the sale price of an item

sale price ............................ the price that is lower than the regular selling price

sales tax .............................. tax on the selling price of an item or service that is purchased

total purchase price ............. the price including sales tax

unit price ............................. the cost of an item per unit of measure or count, such as dollars per pound or cents per ounce
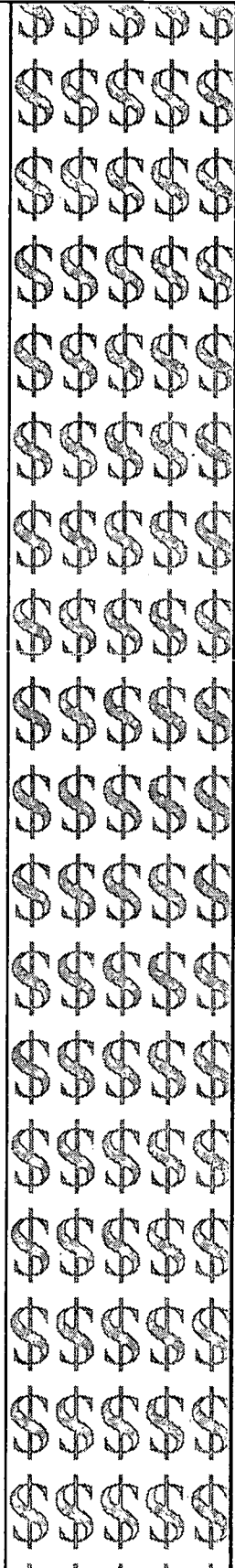
# Sailing into Retailing

## Profit in Selling

Stefan Standriff is a graduate student in the
School of Business at Merrymount College—
earning his Masters of Business Administration
(M.B.A.) degree. In his class, *Business and
Retailing: Selling Goods to Consumers,* one of
his assignments was to conduct a study of the
pricing methods of local area **retailers**—
persons who sell merchandise. Stefan decided
to use a survey to get information on retailers'
pricing methods.
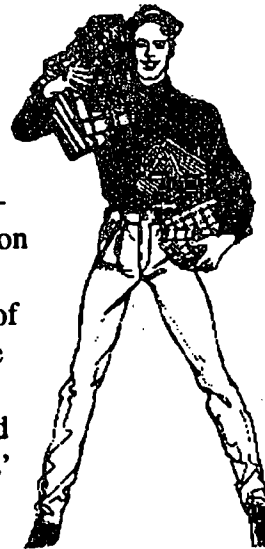
For Stefan, the most difficult part of the survey was thinking up
the *right* questions to get the *right* answers. *Where does the
retailer get his merchandise? Does that affect the selling price
or the price at which a product is offered to the consumer?*
(The consumer is the person who buys a product.) *What
formula does the retailer use to determine the amount of
markup that is necessary for him to make a profit?* (The
*markup* is the dollar amount that the retailer adds to the **cost** of
an item to get the selling price.)

Stefan could see that it would take a little time to get the survey
information from each retailer. He decided to call a number of
the local retailers and schedule a time to meet with them
individually to present his survey. Most of the retailers were
very cooperative and willing to help Stefan. Stefan thought that
his offer to give each retailer a copy of the results of the survey
gave him the extra edge that he needed to enlist their help.
After all, knowing what other local retailers do in their
businesses may give them ideas about how to make their own
businesses better!

After gathering the information from all of the surveys, Stefan
noticed some things that the retailers had in common. Most of

**Go Figure...**
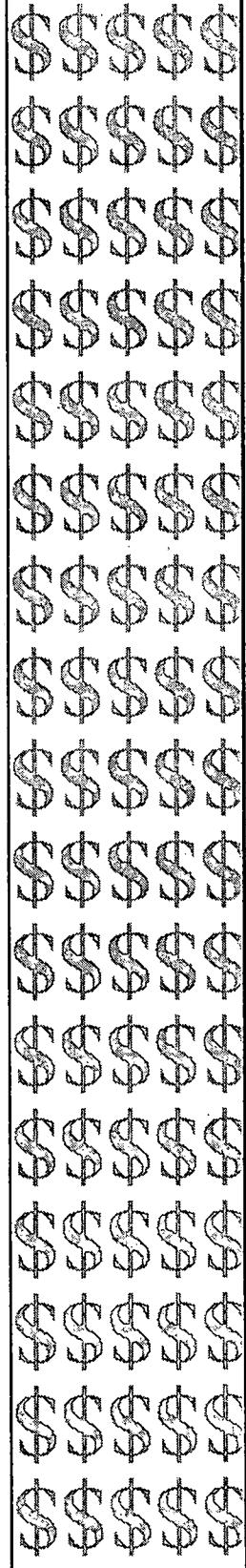
## Go Figure...

them used a similar way of determining the selling price of a product, or the price at which a product is offered for sale to the consumer. In general, the retailers arrived at a selling price by beginning with the amount that *they* paid for an item. This price is the **invoice price**, or *cash price,* of an item. The retailers then added their **buying expenses**—which includes transportation and insurance—to the invoice price. Adding the invoice price and the buying expenses gave the retailer the cost.
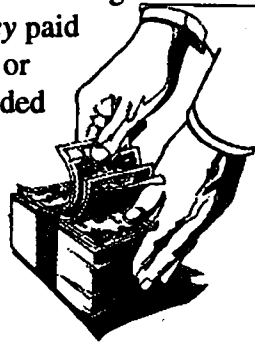
Retailers must also consider **operating expenses** when determining selling prices. Operating expenses are all of the expenses needed to run a store—salaries, rent, utilities, taxes, advertising, etc. The *gross profit* or *markup* is the amount the retailer adds to the cost of an item to get the selling price. The amount of markup or gross profit must be enough to cover the operating expenses and provide a sufficient **net profit**. The *net profit* is the actual amount of money that the retailer will earn after buying expenses and operating expenses are subtracted.

**You Try!**

Refer to the information given above to answer the following questions. Use the **Go Figure...** area for any calculations.
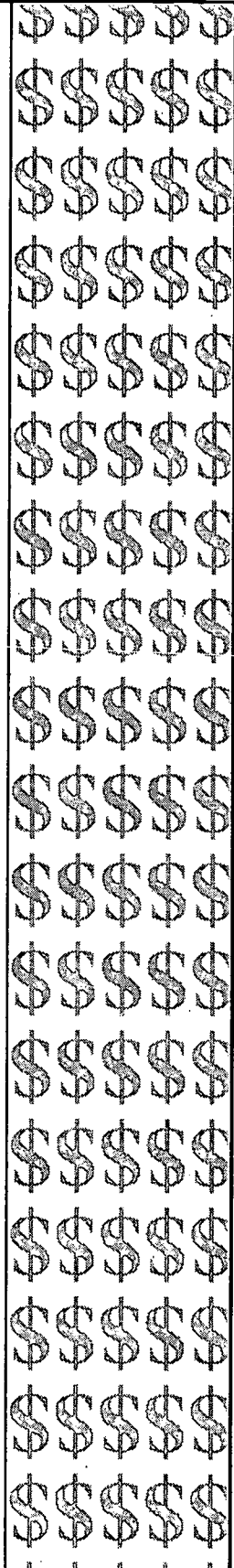
## Buying and Selling

The owner of the electronics and video store *Electronicity* scouted around to find the best place for the store to purchase Sony Discman compact disc players. He found a wholesaler who was selling the players at $74.48. The transportation and insurance costs for getting each item to the store is $3.98. What is the cost of each item for the owner?

Cost = Invoice Price + Buying Expenses

Cost = $74.48 + $3.98

Cost = _____

Back at the store, the owner had to decide on the selling price for each Sony Discman. If he used a 40% rate of markup, how much was his gross profit and what is the selling price?

Gross Profit = Cost x Rate of Markup

Gross Profit = $78.46 x .40

Gross Profit = _____

Selling Price = Cost + Gross Profit

Selling Price = $78.46 + $31.38

Selling Price = _____
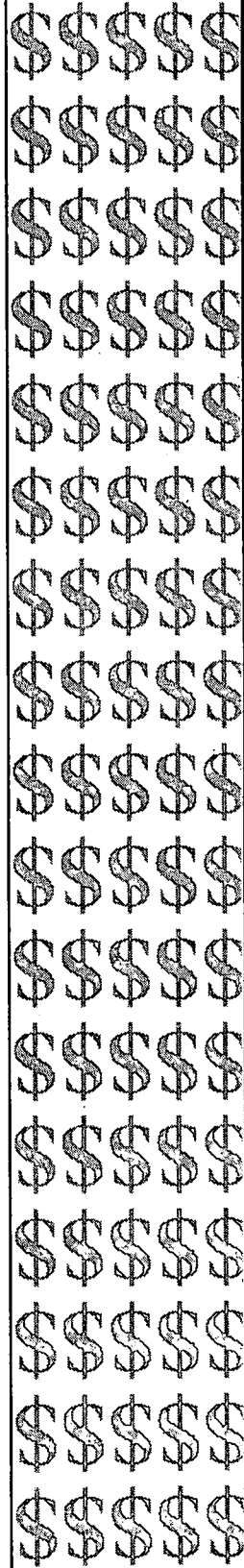
## Go Figure...

**If the owner estimates operating expenses for this item at $20, what is the net profit or the actual amount that the owner will earn from the sale of each Sony Discman?**

GROSS PROFIT – OPERATING EXPENSES = NET PROFIT

$31.38 – $20.00 = NET PROFIT

_____ = NET PROFIT

After compiling all of the information that he had collected, Stefan could see many common business practices in the area. He was also able to rank the businesses that gave consumers the best buys. Using his information, Stefan made an educated guess about the local businesses' effect on consumer purchasing in the area. He hoped that his findings would be of some help to the business owners who cooperated with him on his project.

*Time for some practice!*

1.01
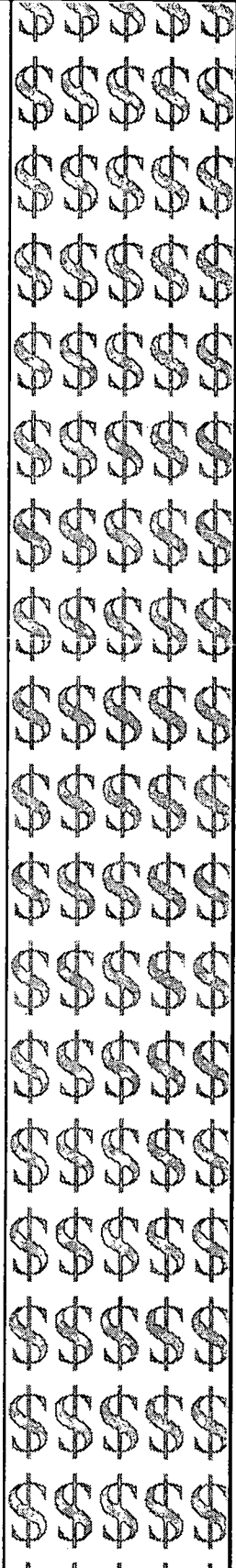
# Amount of Markup

*Solve the problems below. Write the correct answer on each line.*

**AMOUNT OF MARKUP = COST OF GOODS x PERCENT OF MARKUP**

| Product | Cost of Goods | % of Markup | Amount of Markup |
|---------|---------------|-------------|------------------|
| 1. VCR | $280 | 20% | _____ |
| 2. gym equipment | $1650 | 33% | _____ |
| 3. stereo | $452 | 10% | _____ |
| 4. guitar | $588 | 22% | _____ |
| 5. drum set | $1200 | 22.5% | _____ |
| 6. car stereo | $700 | 18.7% | _____ |
| 7. motorcycle | $1520 | 10.5% | _____ |
| 8. computer | $1800 | 21% | _____ |
| 9. bass drum | $2420 | 12% | _____ |
| 10. big screen TV | $2500 | 18.9% | _____ |

11. A home gym is purchased by the retail store for $1050, then marked up 18%. What is the amount of markup?

_____

12. A pair of men's running shoes cost the dealer $30. He marked them up 16%. What is the amount of markup?

_____

161

**$** **1.01**

13. The publisher's cost of the consumer math book is $20. The markup is 15.5%. What is the amount of markup?

   _____

14. A dealer purchases clothing for $20 a piece. If the markup is 25.5%, what is the amount of markup?

   _____

15. At Eye Glow the markup on eye glasses is 20%. What is the amount of markup on a pair of glasses that cost $90?

   _____

16. A vacation trip cost the travel agent $2140, and it is sold at a price of $3020. What is the amount of the markup?

   _____

17. The cost to the dealer for a new jeep is $12,620.52. The selling price is $15,822.23. What is the amount of markup?

   _____

1.01

$

# Selling Price

*Solve the problems below. Write the correct answer on each line. Round to the nearest cent.*

SELLING PRICE = COST OF GOODS + AMOUNT OF MARKUP

| | Item | Cost of Goods | % of Markup | Amount of Markup | Selling Price |
|---|---|---|---|---|---|
| 1. | dozen eggs | $.60 | 63% | _____ | _____ |
| 2. | 5 lb. bag onions | $.45 | 90% | _____ | _____ |
| 3. | 1 lb. spaghetti | $.37 | 40% | _____ | _____ |
| 4. | 1 lb. ground beef | $.82 | 300% | _____ | _____ |
| 5. | 16 oz. can tomato sauce | $.39 | 39% | _____ | _____ |

6. The cost of the prom dress worn by the prom queen was $90 retail, and the markup was 30%. What was the selling price?

   _____

7. A small sailboat cost the dealer $1200. The percent of markup is 42%. What is the selling price?

   _____

8. What is the selling price of a pair of skates, if the dealer's cost is $25 and the markup is 35%?

   _____

**$**  1.01

9. In order to have a successful landscape business Joe bought a lawnmower which cost the dealer $120 and sold with a 25% markup. What was the selling price of the lawnmower?

_____

10. A stereo cost the store owner $216.98. He marked his cost up 33%. What is the amount of markup and the selling price of the stereo?

amount of markup_____

selling price_____

11. The merchant bought a coat for $199.98. He then marked it up 25%. What is the amount of markup and the selling price of the coat?

amount of markup_____

selling price_____

12. The owner of a boat store paid $5280 for a sailboat. He marked it up 18%. What is the selling price and the amount of markup of the sailboat?

amount of markup_____

selling price_____

13. A computer cost Computer World $1692.95. It was marked up 16 ½%. What is the selling price and the amount of markup of the computer?

selling price_____

amount of markup_____

# The Tough Go Shopping!

## Buying Power

Stefan's understanding of retailing did not stop at buying, pricing, and selling products. His understanding allowed him to be a smart *consumer*. His knowledge of pricing methods gave him an edge on getting the best quality products for the least amount of money. He knew that being aware of *best buys* and *discounts* made him a "Power Buyer." The money that he saved on his purchases could be put into a savings account or used to buy other items that he really wanted.

One of Stefan's favorite shopping strategies was finding the **best buy**— using information to determine which size of a product is the best buy based solely on price per unit. The information most often used is the **unit price**. The *unit price* of an item is its cost per unit of measure or count, such as dollars per pound or cents per ounce. It is usually calculated by dividing the price of an item by the total units in that item.

## Which is the Best Buy?

Price per unit

Gatorade®

[32oz. per bottle]     Count per bottle

6¢ per oz     $1.94     Price per bottle

Unit Price     Your Price

Unit of measure or count

Gatorade®

[16oz. per bottle]

9¢ per oz     $1.39

Unit Price     Your Price

**You Try!**
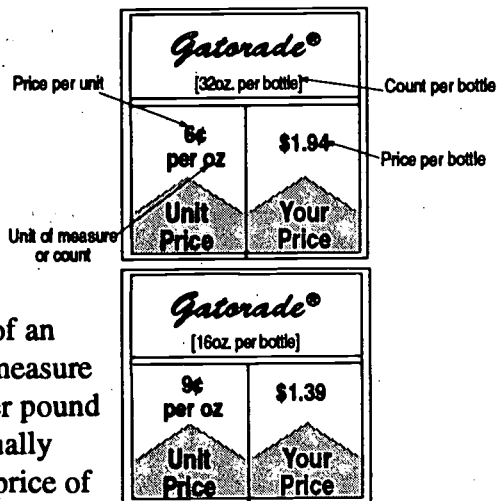
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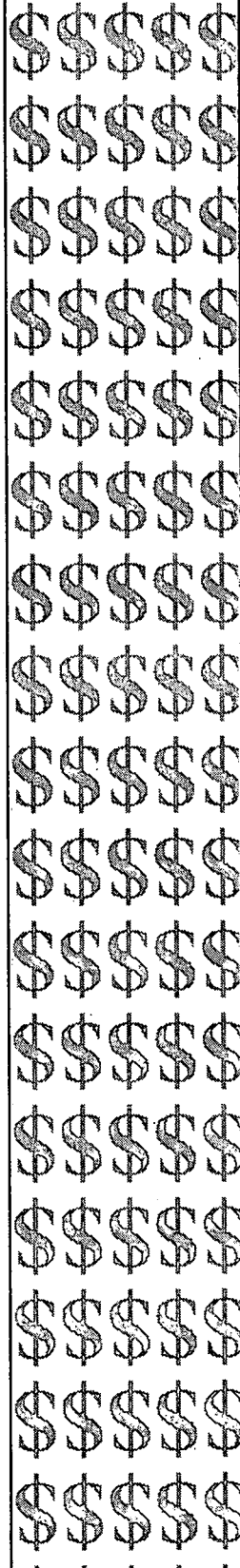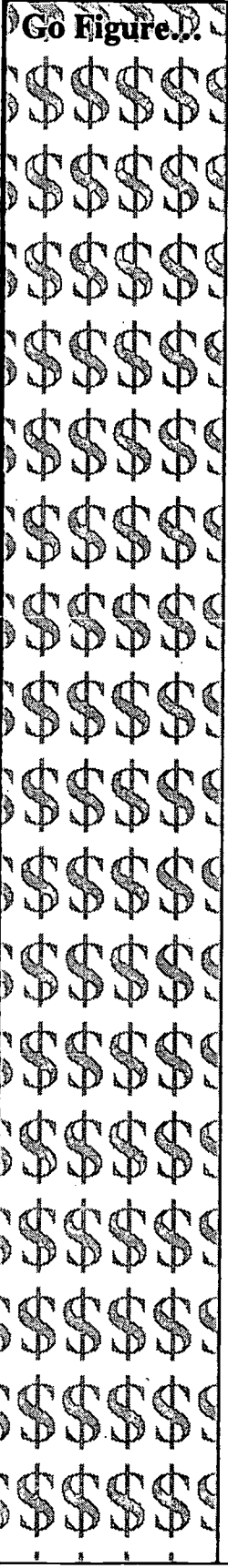
Stefan is purchasing a package of
Michael Air Jordan Hanes underwear.
There are 3 pairs of underwear in each
package for $4.98. What is the unit price
of each item?

PRICE PER ITEM + UNITS = UNIT PRICE

$4.98 + 3 = UNIT PRICE

_____ = UNIT PRICE

Stefan had seen the commercial with Michael Jordan
advertising Hanes underwear. Michael Jordan was his all-time
favorite basketball star. But the businessperson in him told him
that he needed to compare the unit price of another brand with
the unit price of the Hanes underwear.

Stefan picked up a package of BVD
underwear. The package contained 4
pairs of underwear, and sold for $5.98.
The price of the Hanes package is $4.98.
Which package is the *better buy*?

COMPARE UNIT PRICES = UNIT PRICE #1 _< or >_ UNIT
PRICE #2

UNIT PRICE #1: HANES 3-PK. = $1.66

UNIT PRICE #2: BVD 4-PK. = _____

UNIT PRICE OF HANES 3-PK. _< or >_ UNIT PRICE OF BVD 4-PK.

# Buying and Selling

Having made the comparison of the two unit prices, Stefan knew that the package of BVD underwear was the *better buy*. He really wanted the Michael Air Jordan Hanes underwear, so he had to decide whether or not the savings he would get by buying the BVDs was worth passing up the satisfaction he would get by buying the Hanes. He finally decided to buy the BVDs, save the 16¢ per pair of underwear, and use the money he saved to help buy a soft drink before continuing with his shopping.

As Stefan walked through the mall, he noticed a sign in the window of his favorite men's clothing store. The sign said "SALE!" Stefan was all for saving money, so he decided to see if he could get a new shirt for his graduation at a **discount**—the amount of money that is saved by purchasing a product at the **sale price** rather than the *regular selling price*. The *discount* is also called the *markdown*.
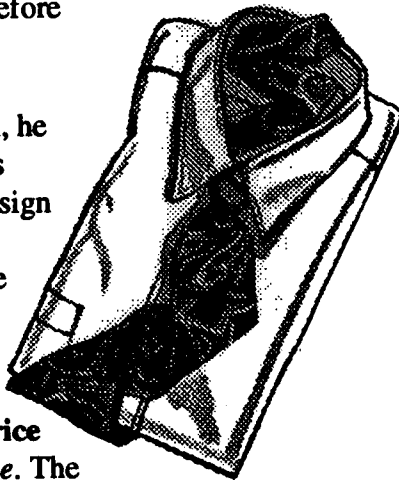
Stefan was very interested in finding out exactly how much *discount* he would get. It was a relatively simple process—find the REGULAR SELLING PRICE of the item and subtract the SALE PRICE from it. Finding the **discount rate** was just a little more difficult. The *discount rate* of an item is its markdown expressed as a percentage of its regular selling price. Most businesses advertise using the discount rate rather than the actual sale price.

**You Try!**

Use the **Go Figure...** area for any calculations.

**Go Figure...**

Stefan saw a white shirt that he liked on the sale rack in the store. The shirt was marked $24, but over the rack a sign read *30% off*. With a discount rate of 30%, how much would Stefan save on the white shirt?

DISCOUNT = REGULAR SELLING PRICE x DISCOUNT RATE

DISCOUNT = $24.00 X .30

DISCOUNT = _____

Stefan decided that the discount rate sounded good, but he wondered just how much the shirt would cost. What is the sale price of the white shirt?

SALE PRICE = REGULAR SELLING PRICE − AMOUNT OF DISCOUNT

SALE PRICE = $24.00 − $7.20

SALE PRICE = _____

Stefan liked the price and bought the shirt. He was pleased to have saved money and to have gotten good quality at the same time. As he continued through the mall, he remembered that he needed some personal items from the drug store. As he shopped for the items in the drug store, he tried to figure out just how much money he would have to pay when he reached the cash register. He had figured the **total selling price**—the sum of selling prices for all items—in his head, except that he had not figured in the **sales tax**—a tax on the selling price of an item or service that is purchased. *Sales taxes* are set at a particular rate and may be different for each state. This rate is a percentage of the total amount purchased. The sales tax for the

# Buying and Selling

state of Florida is 6%. This amount is added to the selling price of some items. Retailers usually do not post the sales tax.

**You Try!**

Use the **Go Figure...** area for any calculations.

> **At the drug store, Stefan bought toothpaste at $2.69, mouthwash at $3.19, shaving cream at $2.89, and laundry detergent at $5.79. What is the amount of sales tax that he will have to pay, using Florida's sales tax rate?**

SALES TAX = SALES TAX RATE x TOTAL SELLING PRICE

SALES TAX = .06 x (_____ + _____ + _____ + _____)

SALES TAX = _____

> **What will be Stefan's *total purchase price*—the total selling price plus the sales tax?**

PURCHASE PRICE = SELLING PRICE + SALES TAX

PURCHASE PRICE = _____ + _____

PURCHASE PRICE = _____

*Time for some practice!*
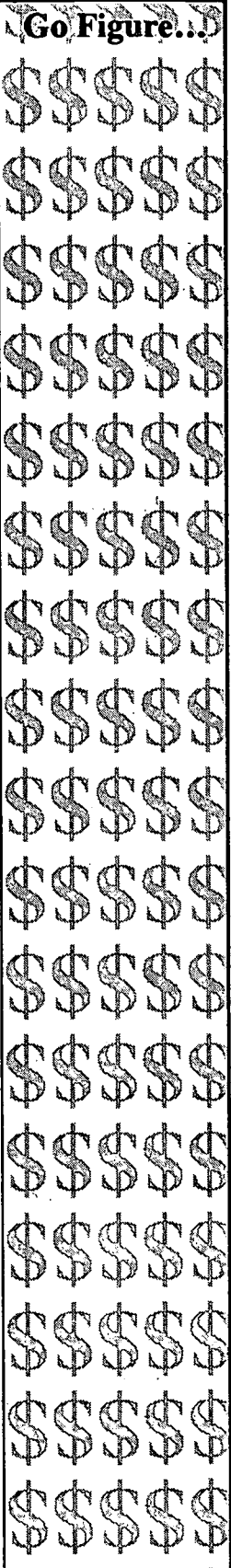
$ 1.02

# Unit Price

*Solve the problems below. Write the correct answer on each line. Round to the nearest cent.*

UNIT PRICE = COST + AMOUNT OR UNITS

| | Cost | Amount | Unit Price | |
|---|---|---|---|---|
| 1. | $.16 | 2 ounces | _____ | per ounce |
| 2. | $.69 | 3 liters | _____ | per liter |
| 3. | $.87 | 3 quarts | _____ | per quart |
| 4. | $.10 | 5 grams | _____ | per gram |
| 5. | $.94 | 2 ounces | _____ | per ounce |

6. The bakery has cookies on sale for $2.99 a dozen. What is the cost of one cookie?

_____

7. What is the cost of one orange if a dozen oranges cost $2.60?

_____

8. A company receives an order for 20 calculators at $128.95. What is the unit cost of each calculator?

_____

9. Three pairs of socks come in a package which sells for $8.55. What is the price of one pair of socks?

_____

170

1.02

# The Best Buy

*Determine which is the best buy. Write the correct answer on each line. Carry the answer out to the third decimal place only.*

UNIT PRICE = COST + COST PER UNIT

1. Which is the better buy, a 10-lb. bag of charcoal for $1.89 or a 20-lb. bag for $3.49?

   unit price 10 lb. _____

   unit price 20 lb. _____

   better buy _____

2. Which is the better buy, pick your own apples for 40¢ a pound or a 5-lb. bag for $1.69?

   unit price pick your own _____

   unit price 5 lb. _____

   better buy _____

3. Debbie's favorite shampoo is available in the following sizes: a 7-oz. bottle for $2.29, a 5-oz. bottle for $1.59, and a 4-oz. bottle for $1.36. What is the unit price of each and which is the best buy?

   unit price 7 oz. _____

   unit price 5 oz. _____

   unit price 4 oz. _____

   best buy _____

**1.02**

4. Six cans of Pepsi cost $2.29 and five cans of Coke cost $1.90. What is the unit price for each and which is the better buy?

       unit price Pepsi _____

       unit price Coke _____

       better buy _____

5. Which is the better buy, 12 ounces of soda for $.59 or 32 ounces of the same soda for $1.29?

       unit price 12 oz. _____

       unit price 32 oz. _____

       better buy _____

6. Potato chips are on sale for 12 ounces for $.99 or 36 ounces for $3.95. Which is the better buy?

       unit price 12 oz. _____

       unit price 36 oz. _____

       better buy _____

7. Yolanda is cooking spaghetti for her club's dinner. She can buy 1 pound for $.98 or 5 pounds for $4.98. Which is the better buy, if she needs 5 pounds?

       _____

8. Juan needs to buy some potatoes. He found the potatoes in 5-pound and 10-pound bags. The 5 lb. bag costs $1.29 and the 10 lb. bag costs $2.49. What is the unit price of each and which is the better buy?

       unit costs _____

       better buy _____

1.03

# Amount of Discount

*Solve the problems below. Write the correct answer on each line.*

**AMOUNT OF DISCOUNT = ORIGINAL PRICE x RATE OF DISCOUNT**

| | Original Price | Rate of Discount | Amount of Discount |
|---|---|---|---|
| 1. | $25.00 | 15% | _____ |
| 2. | $42.00 | 10% | _____ |
| 3. | $37.00 | 20% | _____ |
| 4. | $125.00 | 50% | _____ |
| 5. | $27.00 | 33% | _____ |
| 6. | $52.00 | 40% | _____ |
| 7. | $77.00 | 60% | _____ |
| 8. | $85.00 | 25% | _____ |
| 9. | $12.50 | 20% | _____ |
| 10. | $16.70 | 30% | _____ |

11. Stefan bought a 4-head VCR for $399.00. He was given a 30% discount. What was the amount of his discount?

_____

**1.03**

# Rate of Discount

*Solve the problems below. Write the correct answer as a percent on each line.*

**RATE OF DISCOUNT = AMOUNT OF DISCOUNT + ORIGINAL PRICE**

| | Original Price | Amount of Discount | Rate of Discount |
|---|---|---|---|
| 1. | $122.10 | $48.84 | _____ |
| 2. | $50.00 | $5.00 | _____ |
| 3. | $120.00 | $18.00 | _____ |
| 4. | $250.00 | $125.00 | _____ |
| 5. | $160.00 | $40.00 | _____ |
| 6. | $42.50 | $5.10 | _____ |
| 7. | $163.20 | $36.72 | _____ |
| 8. | $262.00 | $66.81 | _____ |
| 9. | $83.00 | $27.39 | _____ |
| 10. | $120.00 | $65.40 | _____ |

1.03  $

# Amount of Discount and Rate of Discount

*Solve the problems below. Write the correct answer on each line.*

AMOUNT OF DISCOUNT = ORIGINAL PRICE x RATE OF DISCOUNT

RATE OF DISCOUNT = AMOUNT OF DISCOUNT ÷ ORIGINAL PRICE

SALE PRICE = ORIGINAL PRICE − AMOUNT OF DISCOUNT

1. If the original price of a basketball is $24.95 and the amount of discount is $4.99, what is the rate of discount?

   _____

2. Find the amount of discount if a dress that originally cost $60.00 is on sale for 20% off.

   _____

3. What is the sale price of a VCR whose original price was $260 and is now on sale for 30% off?

   _____

4. What is the rate of discount if a $350 stereo is discounted $70?

   _____

5. Find the amount of discount if the regular price of a pair of shoes is $29.95 and the rate of discount is 20%.

   _____

6. Find the sale price of the shoes in problem 5 above.

   _____

175

**1.03**

7. Find the sale price if the amount of discount on a VCR is $26 and the regular price is $259.99.

   _____

8. Find the amount of discount on a car stereo whose regular price is $259.95, if the rate of discount is 25%.

   _____

9. The amount of discount on tapes at the Audio Store is $4 off the regular price. If the regular price is $12.95, what is the discounted price?

   _____

10. What is the amount of discount if a car which sells for $15,250 is sold for 20% off the original price?

   _____

11. Scuba equipment is selling for 30% off the regular price. What is the discounted price of a piece of equipment that costs $260?

   _____

12. Gërta wanted to buy a dresser that cost $499. It was advertised as having a 20% discount. What was the amount of discount being offered on the dresser?

   _____

# Sales Tax

*Solve the problems below. Write the correct answer on each line. Round to the nearest cent.*

SALES TAX = SELLING PRICE X SALES TAX RATE

|  | Selling Price | Sales Tax Rate | Sales Tax |
|---|---|---|---|
| 1. | $69.50 | 6% | _____ |
| 2. | $129.90 | 5% | _____ |
| 3. | $1021.95 | 5.5% | _____ |
| 4. | $88.90 | 6% | _____ |
| 5. | $250.00 | 7% | _____ |
| 6. | $29.95 | 5% | _____ |

7. Pierre bought a smoke alarm for $19.39. The rate of sales tax was 6%. What was the amount of sales tax Pierre paid?

_____

8. If sales tax is 6%, what is the tax on a CD system which sells for $129?

_____

6.01

# Sales and Excise Tax

*Solve the problems below. Write the correct answer on each line. Round the answers to the nearest cent.*

> EXCISE TAX = SELLING PRICE x EXCISE TAX RATE
>
> SALES TAX = SELLING PRICE x SALES TAX RATE

| Item | Selling Price | Excise Tax Rate | Excise Tax |
|------|---------------|-----------------|------------|
| 1. plane ticket | $101.85 | 8% | _____ |
| 2. phone bill | $14.40 | 3% | _____ |
| 3. jewelry | $95.00 | 10% | _____ |

4. Sales tax is charged in addition to the excise tax. If the sales tax is 6% and the excise tax is 10% on an airplane ticket which costs $250, find the sales and the excise tax.

  sales tax _____

  excise tax _____

5. June's telephone bill was $12.50 for regular service and $16.40 for long distance calls. An excise tax of 3% and sales tax of 7% were added to the bill. What was the amount of sales tax and excise tax?

  sales tax _____

  excise tax _____

6. Ian paid $15 for gas and an additional 15% excise tax. What was the amount of excise tax?

  _____

# Buying and Selling

$

7. Find the sales tax on a video tape which sold for $10.95 if the rate of tax is 7%.

   _____

8. Find the excise tax charged on a $159.95 ring if the tax rate is 10%.

   _____

9. Find the total price of the $159.95 ring if there is a 7% sales tax on the ring in addition to 3% excise tax.

   _____

10. What is the sales tax if the amount of tax is 7% and the sale price is $64.98?

    _____

11. A new leather jacket sold for $139.95 not including taxes. There was a 10% excise tax and a 5% sales tax on the jacket.

    What was the excise tax? _____

    What was the sales tax? _____

12. Stefan stayed at a hotel on his trip to south Florida. What did Stefan pay for his room if the room cost $120 and he had to pay a 7% sales tax and a 5% resort tax?

    _____

6.02

# Total Purchase Price, Including Taxes

*Solve the problems below. Write the correct answer on each line. Round the answers to the nearest cent.*

TAX = SELLING PRICE x TAX RATE

TOTAL PRICE = SELLING PRICE + AMOUNT OF TAX

| | Item | Selling Price | Tax Rate | Tax | Total Price |
|---|---|---|---|---|---|
| 1. | CD Player | $139.95 | 5% | _____ | _____ |
| 2. | VCR | $99.95 | 5% | _____ | _____ |
| 3. | bicycle | $320.95 | 6% | _____ | _____ |
| 4. | camcorder | $499.95 | 5% | _____ | _____ |
| 5. | clothes | $39.95 | 6% | _____ | _____ |

6. The tickets to the F.S.U. football game were $50. What was the total price if the sales tax was $3.50?

   _____

7. If the rate of sales tax was 6%, what was the total price of a computer game which sold for $89.95?

   _____

8. The price of a new shirt is $15.95. There is a 6% rate of sales tax. What is the total price of the shirt?

   _____

# Buying and Selling

$

9. Cindy bought a new watch which cost $59.98. There is a 5% sales tax on the watch. How much sales tax did Cindy pay, and what was the total price of the watch?

sales tax_____

total price _____

10. Gërta bought a set of luggage for $350. There is a 8% sales tax on luggage. How much sales tax did she pay, and what was the total price of the luggage?

sales tax_____

total price _____

11. Debbie bought two tickets for the concert at the Civic Center. The tickets cost $40 plus 7% sales tax. What did Debbie pay for the tickets?

_____

12. What is the tax and total price of a car costing $17,500 if the tax rate is 6%?

sales tax_____

total price _____

1.04

# Change after a Purchase

*Solve the problems below. Write the correct answer on each line.*

CHANGE = AMOUNT TENDERED − AMOUNT OF PURCHASE

| Amount of Purchase Including Tax | Amount Tendered | Change |
|---|---|---|
| 1.    $25.78 | $30.00 | _____ |
| 2.    $12.80 | $15.00 | _____ |
| 3.    $16.17 | $20.00 | _____ |
| 4.    $126.42 | $130.00 | _____ |
| 5.    $19.20 | $20.00 | _____ |
| 6.    $8.23 | $10.00 | _____ |
| 7.    $275.63 | $280.00 | _____ |
| 8.    $18.75 | $20.00 | _____ |
| 9.    $4.52 | $5.00 | _____ |
| 10.    $34.21 | $40.00 | _____ |

11. How much change will you receive if the total cost of new jeans is $22.50 and you give the sales clerk $30?

_____

## Buying and Selling

12. Cassandra went shopping for new school clothes. She bought a dress which cost $39.99, shoes for $21.99, and a purse for $14.99. The tax is $5.39. How much change would she get back if she gave the sales clerk $100?

_____

13. Stefan bought a gift for a friend. The total price, including tax, was $43.50. He gave the clerk $50. How much change did he receive?

_____

14. Cassandra bought a glider swing for $206.70, including tax. She gave the clerk $210. How much change did she receive?

_____

15. Helen bought a new jewelry box. Her bill came to $105.93, including the tax. She gave the clerk $120. How much change did she receive?

_____

16. Juan bought a new pair of tennis shoes. The clerk told him his bill came to $80.25. He gave the clerk $85. How much change did he receive?

_____

LEASE MAIL THIS PORTION WITH PAYMENT TO P.O. BOX 2390

*Gusin's*
DEPARTMENT STORE

| ACCOUNT NO. | 064-173-357-15 |
|---|---|
| PREVIOUS BALANCE | .00 |
| MINIMUM PAYMENT | 50.00 |
| THIS PAYMENT | |
| BILL CLOSING DATE | 04/25/94 |

CORRECT, PLEASE CHECK BOX
ON REVERSE SIDE

| DESCRIPTION | PURCHASES | CREDITS | PAYMENTS | ITEM NO. |
|---|---|---|---|---|
| HOUSEWARES | 39.90 | | | 04-951H |
| ELECTRONICS | 499.00 | | | 05-753E |
| 4-14   PAYMENT—THANK YOU | | | 50.00 | 02-123P |

| PREVIOUS BALANCE | CHARGES | FINANCE CHARGE | CREDIT / RETURNS | PAYMENTS | NEW BALANCE | PAST DUE AMOUNT |
|---|---|---|---|---|---|---|
| .00 | 576.62 | 8.65 | .00 | 50.00 | 526.62 | .00 |

| ACCOUNT NO. | CREDIT LIMIT | TO AVOID ADDITIONAL FINANCE CHARGE, PAY BALANCE IN FULL BY DUE DATE | PAYMENT DUE DATE | MINIMUM PAYMENT DUE |
|---|---|---|---|---|
| 064-173-357-15 | 800 | | 05-25-94 | 50.00 |

# Borrowing and Lending

## Borrowing and Lending

# Vocabulary

*Study the terms and definitions below.*

## Revolving Credit Accounts

annual percentage rate ....... the rate (in percent) of the finance charge on money borrowed

charge .................................. use of a charge account

charge account ..................... an account that allows you to make periodic payments rather than pay at the time of the purchase

compound interest .............. interest calculated on the daily, weekly, or monthly balance of an account

credit .................................. an account from which a consumer may borrow to pay for purchases

credit card ........................... a card showing the salesperson that the cardholder has been approved for credit

finance charges .................... the cost to a customer to use credit to purchase something

monthly statement .............. a record of purchases, payments, and finance charges for a monthly billing cycle

**Go Figure...**
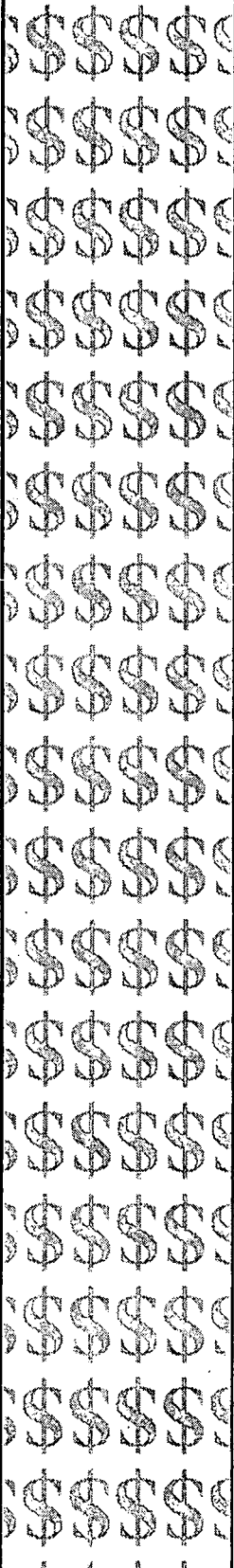
sales receipt ......................... a printed acknowledgement of having received and paid for or charged a good or goods

unpaid balance ................... the amount due on an account after payments and credits have been deducted

## Installment Buying

amount financed ................. the amount of money owed on a purchase after the down payment is made

cash price ............................ the cost of a purchase without additional finance charges

down payment .................... the part of the purchase price that is paid in cash at the time of buying when an item is financed using an installment loan

installments......................... the equal payments, usually monthly, paid on an installment loan

installment loan ................... a loan that is repaid over a certain period of time, usually in equal payments

installment price ................. total cost using the installment plan

# CHAAAARGE It!

## Revolving Credit Accounts

Angela was a regular customer at Lexington's Department Store. On one of her weekend shopping trips, the department store had begun a new promotion for new **credit card** accounts. (A credit card provides **credit**, or shows a salesperson that you've been approved for credit.) The store was offering a gift of an AM-FM clock radio and 15% off of the first credit card purchase. Applying for a credit card at Lexington's had never occurred to Angela, but she needed a clock radio. In addition, having a credit card would allow her to buy the things she wanted or needed, and pay for them later. She wouldn't have to carry a lot of cash with her or write a check. She could even purchase items over the phone if she wanted to. That would save her a lot of time—another advantage of having a credit card.

Before Angela could open a **charge account**, she had to fill out a credit card application. The credit card that she was applying for is called a *single purpose* card—it can be used only at a Lexington's department store. Other single-purpose cards include gas cards and phone cards. Some cards are *multi-purpose* cards. A multi-purpose card can be used to **charge** purchases at a variety of businesses. For example, the same multi-purpose card could be used at restaurants, rental car agencies, hotels, and a variety of other businesses too.

On the application, there was a blank for information about a *co-applicant*, or the person with whom Angela might have a joint account. Angela's charge account, however, would be an *individual* account. If she were married, then she might rather have a joint account, which would give her spouse charging privileges also.

**Go Figure...**

**You Try!**
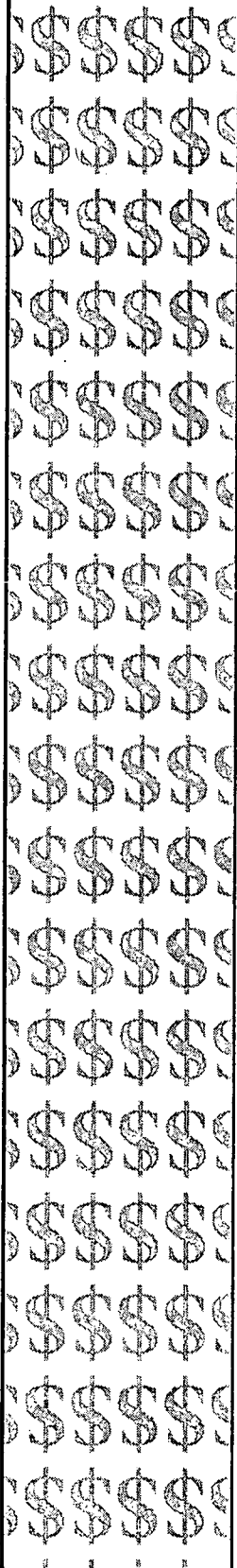
Refer to the credit card application on the following page to answer the questions below. Use the **Go Figure...** area for any calculations.

1. If Angela has lived in her apartment for 18 months, would she complete line 4?

   _____

2. Suppose Angela has lived in her apartment for 2 years and 3 months, would she complete line 4?

   _____

3. If Angela has had her present job for one year and 9 months, would she complete the last line of section 5?

   _____

4. If Angela has had her present job for almost 3 years, would she complete the last line of section 5?

   _____

5. If Angela has worked at her present job for exactly 48 months, how would she complete the box that asks "How long?" in section 5?

   _____

# Borrowing and Lending

## Lexington's
### DEPARTMENT STORE
## CREDIT CARD APPLICATION

**1** TYPE OF ACCOUNT REQUESTED (check one)    INDIVIDUAL ☐     JOINT ☐
(Married applicants may apply for separate accounts)

**2** LAST NAME      FIRST NAME      INITIAL

**3** ADDRESS    APT.#    CITY    STATE    ZIP CODE

☐ RENT    HOW LONG?    HOME PHONE      WORK PHONE
☐ OWN      YRS. (   )      (   )

DATE OF BIRTH      SOCIAL SECURITY NO.      DRIVER'S LICENSE NO.—STATE

**4** PREVIOUS ADDRESS (If less than 2 yrs at present address)    CITY    STATE    ZIP CODE

**5** EMPLOYER      POSITION      HOW LONG?   YRS.

BUSINESS ADDRESS      BUSINESS PHONE (   )

FORMER BUS. EMPLOYER (If less than 2 years at present)

**6** CO-APPLICANT INFORMATION (If Joint Account requested)
LAST NAME    FIRST NAME    INITIAL    RELATIONSHIP TO APPLICANT (if any)    SOCIAL SECURITY NO.

EMPLOYER    EMPLOYER'S ADDRESS    HOW LONG?   YRS.

**7** BANK—LIST BRANCH AND ADDRESS      ☐ CHECKING   ☐ SAVINGS

OTHER CREDIT REFERENCES?      ACCOUNT NO.

Without considering any of the *disadvantages* of using a credit card, Angela decided to fill out the application for the credit card and to collect her new clock radio. And since she came in the store to make some purchases, she would just use her instant credit account and save 15% at the same time. Angela did not realize that she might buy more than she could afford, since she did not need cash to make purchases. She didn't think about the **compound interest**—interest on the amount charged to her account—that she would have to pay. Most companies call this compound interest the **finance charges**—their fee for allowing you to use their credit and pay later for purchases.

The interest rate on the Lexington's credit card was $1\frac{1}{2}\%$ per month. This means that Angela would have to pay an **annual percentage rate** (APR) of 18% on her **unpaid balance**. If Angela paid her bill in full within 30 days, then she would not have to pay any *finance charges*. However, if she charged more than she could pay in a month, then she would make a *partial* payment and pay the finance charges on the unpaid balance.

**You Try!**

Refer to the account statements on the next page to answer the questions that follow. Use the **Go Figure...** area for any calculations.

# Borrowing and Lending

Angela's first bill:

Angela's account number

### PLEASE MAIL THIS PORTION WITH PAYMENT TO P.O. BOX 2300

**Lexington's**
DEPARTMENT STORE

Angela B. Gibson
816 Melrose Place
7345 N. Main
Chicago, IL 20002

☐ IF ADDRESS IS INCORRECT, PLEASE CHECK BOX AND CORRECT ON REVERSE SIDE

| ACCOUNT NO. | 064-173-357-15 |
|---|---|
| PREVIOUS BALANCE | .00 |
| MINIMUM PAYMENT | 20.00 |
| THIS PAYMENT | |
| BILL CLOSING DATE | 04/25/94 |

Last date transactions were processed

| DATE | DEPT. | DESCRIPTION | PURCHASES | CREDITS | PAYMENTS | ITEM NO. |
|---|---|---|---|---|---|---|
| 3-28 | 852 | HOUSEWARES | 39.90 | | | 04-951H |
| 3-28 | 654 | ELECTRONICS | 499.00 | | | 05-753E |

Amount Angela owes.

| PREVIOUS BALANCE | CHARGES | FINANCE CHARGE | CREDIT / RETURNS | PAYMENTS | NEW BALANCE | PAST DUE AMOUNT |
|---|---|---|---|---|---|---|
| .00 | 538.90 | .00 | .00 | 00.00 | 538.90 | .00 |

| ACCOUNT NO. | CREDIT LIMIT | TO AVOID ADDITIONAL FINANCE CHARGE, PAY → BALANCE IN FULL BY DUE DATE | PAYMENT DUE DATE | MINIMUM PAYMENT DUE |
|---|---|---|---|---|
| 064-173-357-15 | 800 | | 05-25-94 | 20.00 |

Angela's second bill:

### PLEASE MAIL THIS PORTION WITH PAYMENT TO P.O. BOX 2300

**Lexington's**
DEPARTMENT STORE

Angela B. Gibson
816 Melrose Place
7345 N. Main
Chicago, IL 20002

☐ IF ADDRESS IS INCORRECT, PLEASE CHECK BOX AND CORRECT ON REVERSE SIDE

| ACCOUNT NO. | 064-173-357-15 |
|---|---|
| PREVIOUS BALANCE | 538.90 |
| MINIMUM PAYMENT | 20.00 |
| THIS PAYMENT | |
| BILL CLOSING DATE | 05/25/94 |

| DATE | DEPT. | DESCRIPTION | PURCHASES | CREDITS | PAYMENTS | ITEM NO. |
|---|---|---|---|---|---|---|
| 4-14 | | PAYMENT—THANK YOU | | | 50.00 | 02-123P |

Amount Angela now owes.

Amount Angela owed last month

| PREVIOUS BALANCE | CHARGES | FINANCE CHARGE | CREDIT / RETURNS | PAYMENTS | NEW BALANCE | PAST DUE AMOUNT |
|---|---|---|---|---|---|---|
| 538.90 | .00 | 7.33 | .00 | 50.00 | 496.23 | .00 |

| ACCOUNT NO. | CREDIT LIMIT | TO AVOID ADDITIONAL FINANCE CHARGE, PAY → BALANCE IN FULL BY DUE DATE | PAYMENT DUE DATE | MINIMUM PAYMENT DUE |
|---|---|---|---|---|
| 064-173-357-15 | 800 | | 06-25-94 | 20.00 |

191
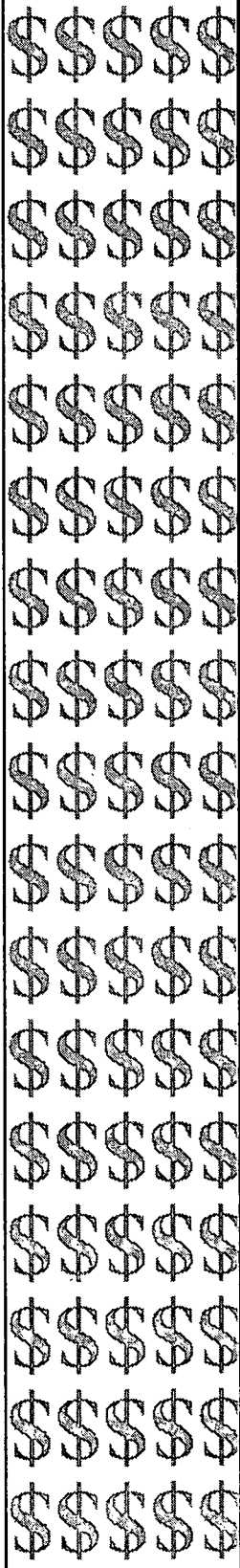
**Go Figure...**

On March 28th, Angela bought a lamp for $39.90 and a stereo for $499, including tax. She charged both purchases. After she received her first bill, she paid $50 on her account. What is the unpaid or new balance on Angela's account at the beginning of the second month?

UNPAID BALANCE = (PREVIOUS BALANCE + CHARGES) + FINANCE CHARGE − (PAYMENTS + CREDIT/RETURNS)

UNPAID BALANCE = ($538.90 + 0) + $7.33 − ($50)

UNPAID BALANCE = _____

The finance charge on Angela's account is $1\frac{1}{2}\%$ a month on the unpaid balance. What finance charges will be added to her next bill?

FINANCE CHARGE = UNPAID BALANCE x MONTHLY INTEREST RATE

FINANCE CHARGE = $496.23 x .015

FINANCE CHARGE = $_____

Angela paid her balance in full on June 10th. What will be her finance charge on the next billing statement?

FINANCE CHARGE = _____

# Borrowing and Lending

When Angela made her first credit card purchase, she received a **sales receipt**. She took a good look at the receipt to make sure that it had the correct price of the item that she was buying. Then she signed the receipt, and the store clerk gave her a copy of it. She then put the receipt in a safe place in case she needed it later. The store uses this receipt to figure the bill, and then mails a billing statement, or **monthly statement**, to customers who have used their charge cards. Angela knew that she alone was responsible for making sure that her statement was correct, and informing the company if she found any mistakes. When Angela received the billing statement, she checked her receipts against the information on the billing statement. She followed the five steps listed below.

1.  Compare the receipts and the billing statement. Be certain the billing statement is correct.

2.  Make sure any payments you made have been credited to your account.

3.  If you returned any purchases, make sure the refund has been credited to your account.

4.  Look to see how much you owe and the date payment is due.

5.  Look to see how much credit you have left in your account. A *credit limit* is the maximum amount you can charge.

Refer to Angela's second bill on page 107 to answer the questions below. Use the **Go Figure...** area for any calculations.
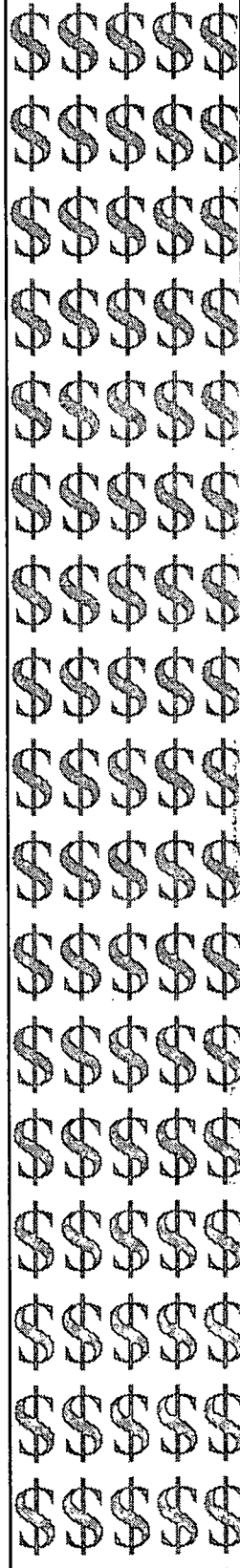
**Go Figure...**

1. What is the number of Angela's account? _____

2. When is her *payment due date*? _____

3. What is the *credit limit* on her account? _____

4. What is the amount of *credits/returns*? _____

5. What is the amount of the *finance charge*? _____

6. What is the *new balance*? _____

7. What is the *minimum payment due*? _____

Angela had to pay a costly finance charge on her second bill. However, if Angela pays her monthly bill in full each time, she will not have to pay a finance charge, or interest on her unpaid balance. Angela found alternatives to charging more than she could afford to pay. She could save her money in a savings account and earn interest until she had enough money to pay for expensive purchases.

Angela learned important lessons about charge cards and charge accounts. She learned that when she gave a salesperson her credit card to charge a purchase, she was really making an agreement to pay at a later time. Angela also learned that if she didn't pay her charge account in full each month, then her purchases were going to cost more than the price of the item. It's easy for buyers to *forget* that finance charges will be added to their balance.

*Time for some practice!*

2.01-2.02

$

# Finance Charges

*Solve the problems below. Write the correct answer on each line. Round to the nearest cent.*

FINANCE CHARGE = PREVIOUS BALANCE x MONTHLY RATE

| | Previous Balance | Monthly Rate | Finance Charge |
|---|---|---|---|
| 1. | $22.50 | 1.5% | _____ |
| 2. | $175.20 | 1.85% | _____ |
| 3. | $652.10 | 1.6% | _____ |
| 4. | $85.25 | 1.2% | _____ |
| 5. | $59.06 | 1.52% | _____ |
| 6. | $215.10 | 1.7% | _____ |
| 7. | $92.20 | 1.2% | _____ |
| 8. | $16.22 | 1.8% | _____ |
| 9. | $152.11 | 1.6% | _____ |
| 10. | $81.12 | 1.85% | _____ |

**2.01-2.02**

# New Balance

*Solve the problems below. Write the correct answer on each line.*

NEW BALANCE = PREVIOUS BALANCE + FINANCE CHARGE + TOTAL PURCHASES
− PAYMENTS AND CREDITS

| | Previous Balance | Finance Charge | Total Purchases | Payments and Credits | New Balance |
|---|---|---|---|---|---|
| 1. | $22.50 | $2.10 | $25.60 | $15.00 | _____ |
| 2. | $180.50 | $11.50 | $6.00 | $35.00 | _____ |
| 3. | $151.60 | $8.62 | 0 | $120.00 | _____ |
| 4. | $15.00 | $.65 | $62.10 | $10.00 | _____ |
| 5. | 0 | 0 | $27.80 | 0 | _____ |
| 6. | $27.80 | $.23 | 0 | $25.00 | _____ |
| 7. | $120.00 | 0 | 0 | $120.00 | _____ |
| 8. | $521.00 | $15.80 | 0 | $125.00 | _____ |
| 9. | $162.50 | $2.25 | $25.60 | $50.00 | _____ |
| 10. | $280.00 | 0 | $650.20 | $110.00 | _____ |

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2.01-2.02

# Finance Charge and New Balance

*Solve the problems below. Write the correct answer on each line.*

FINANCE CHARGE = PREVIOUS BALANCE x MONTHLY RATE

NEW BALANCE = PREVIOUS BALANCE + FINANCE CHARGES + TOTAL PURCHASES
− PAYMENTS AND CREDITS

| | Previous Balance | Monthly Rate | Finance Charge | Total Purchases | Payments and Credits | New Balance |
|---|---|---|---|---|---|---|
| 1. | $16.50 | 1.8% | ___ | $20.00 | $15.00 | ___ |
| 2. | $108.25 | 1.5% | ___ | $22.50 | $100.00 | ___ |
| 3. | $55.81 | 1.19% | ___ | 0 | $50.00 | ___ |
| 4. | $652.50 | 1.7% | ___ | $10.00 | $150.00 | ___ |
| 5. | $352.25 | 1.5% | ___ | 0 | $25.00 | ___ |
| 6. | $117.65 | 1.25% | ___ | $25.52 | $15.00 | ___ |
| 7. | $35.22 | 1.8% | ___ | $6.95 | $35.00 | ___ |
| 8. | 0 | 1.8% | ___ | $15.80 | $5.00 | ___ |
| 9. | $14.70 | 1.7% | ___ | 0 | $5.00 | ___ |
| 10. | .22 | 1.5% | ___ | $141.52 | 0 | ___ |

2.01-2.02

# Finance Charge and New Balance

*Solve the problems below. Write the correct answers in the spaces provided.*

1. Mrs. Johnson recently received the statement shown below for her monster account. The company charges a monthly finance charge of 1.8%. Using the formulas on p. 113, find her finance charge and new balance.

| Previous Balance | Closing Date This Month | Closing Date Last Month | Finance Charges | Total Purchases | Late Charges | Payments and Credits | New Balance |
|---|---|---|---|---|---|---|---|
| $1020.60 | 9-02-93 | 8-01-93 | | $28.98 | 0 | $352.00 | |

2. Chris has a charge account at Allen's Sports Store. His statement for September is given below. The company charges a monthly finance charge of 1.7%. Using the formulas on p. 113, find his finance charge for the month and his new balance.

| Previous Balance | Closing Date This Month | Closing Date Last Month | Finance Charges | Total Purchases | Late Charges | Payments and Credits | New Balance |
|---|---|---|---|---|---|---|---|
| $620.40 | 9-06-93 | 8-06-93 | | $22.50 | 0 | $220.00 | |

3. Angela received her statement from Lexington's Department Store. They charge 1.6% monthly for the finance charge. Using the statement below, find her finance charge and new balance.

| Previous Balance | Closing Date This Month | Closing Date Last Month | Finance Charges | Total Purchases | Late Charges | Payments and Credits | New Balance |
|---|---|---|---|---|---|---|---|
| $500.00 | 11-02-94 | 10-02-94 | | $22.95 | $15.00 | $150.00 | |

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2.01-2.02

$

# Unpaid Balance and Finance Charge

*Some companies charge finance charges from the day of purchase. Using the formulas below, solve the problems. Write the correct answer on each line.*

UNPAID BALANCE = PREVIOUS BALANCE − PAYMENTS AND CREDITS

FINANCE CHARGE = UNPAID BALANCE × MONTHLY INTEREST RATE

| | Previous Balance | Payments and Credits | Unpaid Balance | Monthly Interest Rate | Finance Charge |
|---|---|---|---|---|---|
| 1. | $252.02 | $50.00 | _____ | 1.8% | _____ |
| 2. | $821.60 | $25.60 | _____ | 1.8% | _____ |
| 3. | $265.98 | $150.00 | _____ | 1.6% | _____ |
| 4. | $52.21 | $52.21 | _____ | 1.5% | _____ |
| 5. | $117.50 | $17.50 | _____ | 1.71% | _____ |
| 6. | $82.65 | $82.65 | _____ | 1.6% | _____ |
| 7. | $215.00 | $200.00 | _____ | 1.8% | _____ |
| 8. | $163.90 | $63.00 | _____ | 1.71% | _____ |
| 9. | $55.84 | $25.00 | _____ | 1.6% | _____ |
| 10. | $216.25 | $20.00 | _____ | 1.5% | _____ |

**2.01-2.02**

# Finance Charge and New Balance Using Average Daily Balance

*Solve the problems below. Write the correct answer on each line. Round your answer to the nearest cent.*

FINANCE CHARGE = AVERAGE DAILY BALANCE x PERIODIC RATE

NEW BALANCE = FINANCE CHARGE + PREVIOUS BALANCE + TOTAL PURCHASES

| | Average Daily Balance | Periodic Rate | Finance Charge | Previous Balance | Total Purchases | New Balance |
|---|---|---|---|---|---|---|
| 1. | $150 | 1.5% | _____ | $134 | $125 | _____ |
| 2. | $175 | 1.6% | _____ | $156 | $70 | _____ |
| 3. | $125 | 1.5% | _____ | $105 | $100 | _____ |
| 4. | $225 | 1.7% | _____ | $210 | $15 | _____ |
| 5. | $80 | 1.8% | _____ | $75 | $160 | _____ |
| 6. | $115 | 1.5% | _____ | $98.50 | $120 | _____ |
| 7. | $150 | 1.5% | _____ | $130.80 | $20 | _____ |
| 8. | $50 | 1.7% | _____ | $48.20 | $200 | _____ |

9. Katrina's charge account has a previous balance of $265.25. She had new purchases totaling $62.50 and finance charges of $2.83. What is Katrina's new balance?

_____

## Borrowing and Lending

# New Balance

*Solve the problems below. Write the correct answer on each line.*

NEW BALANCE = PREVIOUS BALANCE + FINANCE CHARGE + TOTAL PURCHASES
– PAYMENTS AND CREDITS

|  | Previous Balance | Finance Charge | Total Purchases | Payment | New Balance |
|---|---|---|---|---|---|
| 1. | $150 | $1.45 | $125 | $75 | _____ |
| 2. | $175 | $2.50 | $70 | $80 | _____ |
| 3. | $125 | $1.50 | 00 | $75 | _____ |
| 4. | $225 | $1.65 | $15 | $50 | _____ |
| 5. | $80 | $1.95 | $160 | $65 | _____ |
| 6. | $115 | $2.30 | $120 | $60 | _____ |
| 7. | $150 | $1.45 | $20 | $25 | _____ |
| 8. | $50 | $1.85 | $200 | $75 | _____ |

9. What is the new balance on a charge account with a previous balance of $175.25, new purchases of $72.29, and finance charges of $1.35?

_____

# How Long Do I Have to Pay?

## Installment Buying

Juan Rivera was pleased with all of his new
furniture, but he continued to watch his old
TV. It served him well when he was in
school, but it was far too small for
entertaining his friends. Besides, it
didn't fit in with his new furniture.
He wanted a larger, more modern
TV.

Juan shopped around at electronics stores to find the best buy
on a TV. He found what he thought was a great deal. One of
the stores had a 26-inch TV on sale for $625. He talked with
one of the salespersons and found that the store had a financing
plan of its own. The store offered an **installment loan**. An
*installment loan* is one that is repaid in several equal payments,
or **installments**, over a specified period of time. If Juan could
make a 20% **down payment**, a portion of the **cash price** of the
purchase, then he could pay for his TV in 18 equal monthly
installments. The portion that he owed after making the down
payment is called the
*amount financed*.

## Borrowing and Lending

You Try!
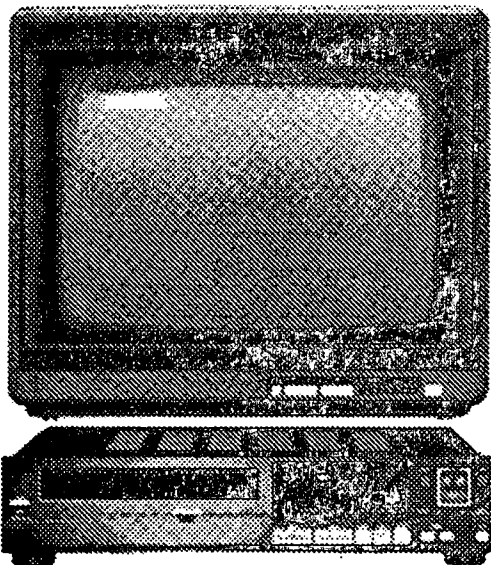
Use the Go Figure... area for any calculations.

**Juan was asked to make a down payment of 20% of the cash price of the TV. How much would his down payment be?**

DOWN PAYMENT = CASH PRICE x PERCENTAGE OF CASH PRICE

DOWN PAYMENT = $625 x 20%

DOWN PAYMENT = $625 x .20

DOWN PAYMENT = _____

**Find the amount of money that Juan had to finance to get the TV on an installment loan.**

AMOUNT FINANCED − DOWN PAYMENT = CASH PRICE

AMOUNT FINANCED = $625 − $125

AMOUNT FINANCED = _____

Juan had learned about interest rates when he applied for a bank loan to buy furniture for his new apartment. He knew that he would have to pay finance charges for his use of the money. He knew that his monthly payment would include the total amount financed plus the finance charge divided into equal payments. All lenders are required by law to inform the borrower of the finance charge.

**Go Figure...**

**You Try!**
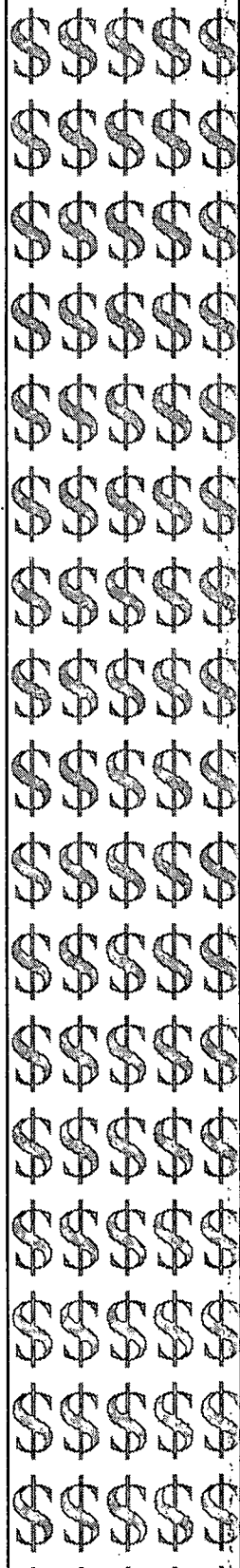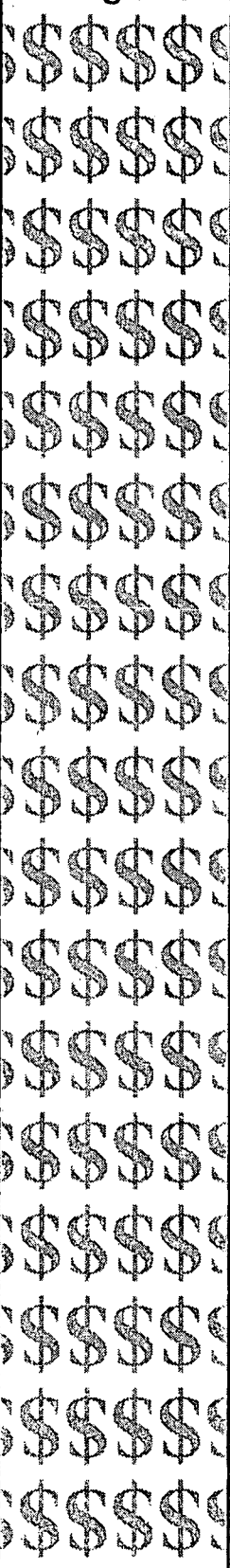
Use the table shown below to follow the steps below. Use the
Go Figure... area for any calculations.

**Juan knew that he wanted to repay his
loan in 18 months, and that the annual
percentage (APR) would be 18%. The
bank officer showed him the table below.
Find the amount of the finance charge
that Juan will pay, and the total amount
he will have to repay.**

| APR | Term in Months | If You Finance... | | | |
| | | $200 | $500 | $1000 | $1500 |
| | | Your Monthly Payments Are | | | |
| --- | --- | --- | --- | --- | --- |
| 10% | 6 | 34.31 | 85.78 | 171.56 | 257.34 |
| | 12 | 17.58 | 43.95 | 87.91 | 131.87 |
| | 18 | 12.01 | 30.02 | 60.05 | 90.08 |
| | 24 | 9.22 | 23.07 | 46.14 | 69.21 |
| 15% | 6 | 34.80 | 87.01 | 174.03 | 261.05 |
| | 12 | 18.05 | 45.12 | 90.25 | 135.38 |
| | 18 | 12.47 | 31.19 | 62.38 | 93.57 |
| | 24 | 9.69 | 24.24 | 48.48 | 72.72 |
| 18% | 6 | 35.10 | 87.76 | 175.52 | 263.28 |
| | 12 | 18.33 | 45.84 | 91.68 | 137.52 |
| | 18 | 12.76 | 31.90 | 63.80 | 95.70 |
| | 24 | 9.98 | 24.96 | 49.92 | 74.88 |

INSTALLMENT PRICE = NO. OF PAYMENTS x MO. PAYMENT

INSTALLMENT PRICE = 18 x _____

INSTALLMENT PRICE = _____

FINANCE CHARGE = INSTALLMENT PRICE – AMOUNT FINANCED

FINANCE CHARGE = _____ – $500

FINANCE CHARGE = _____

# Borrowing and Lending

Juan was very happy to go home with his new 26-inch color TV. After he had put the TV in his new living room, Juan checked the receipts and the agreement that he had signed. He noticed the installment price, or the actual amount of money that he would be paying for the TV, and wondered if he had done the right thing. To determine whether he should have gotten an installment loan, Juan should have asked himself a few questions.

- **Are his monthly payments too much of his net income?** As a general rule, the total payment on all loans should not exceed 20% of one's net income.

- **Has he saved enough money to cover monthly payments?**

- **If he lost his job, would his savings cover two installments on the loan?**

If Juan had to answer "no" to any of these questions, then it would have been better for him not to have bought on credit. Juan should have gotten enough information together to calculate how much he'd have to pay back before he borrowed the money.

The greatest benefit of buying on credit is being allowed to buy something now and pay for it later. However, the cost of repayment can be more than we can afford.

Remember, borrowing too much money may be easy. Repayment may be harder. Be a smart consumer of loans.

*Time for some practice!*
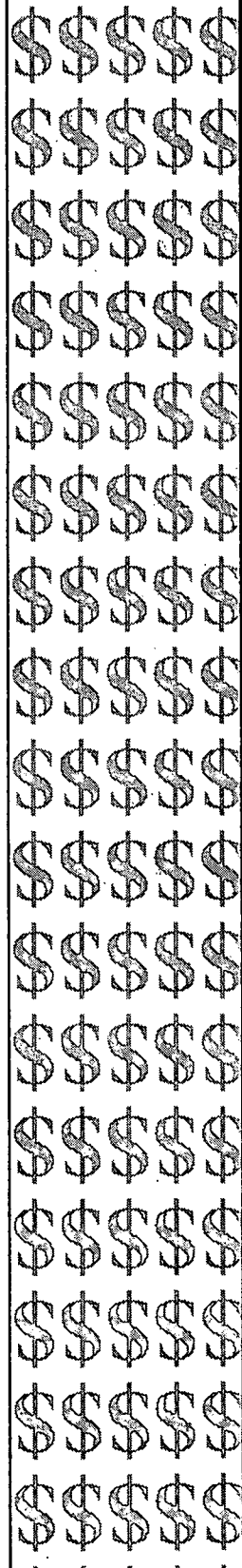
**2.03-2.04**

# Down Payment on an Installment Purchase

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

DOWN PAYMENT = CASH PRICE x PERCENT OF DOWN PAYMENT

| Item | Cash Price | % of Down Payment | Down Payment |
|------|-----------|-------------------|--------------|
| 1. stereo | $202.10 | 10% | _____ |
| 2. car radio | $186.50 | 12% | _____ |
| 3. dishwasher | $252.60 | 20% | _____ |
| 4. refrigerator | $1263.45 | 15% | _____ |
| 5. bedroom suite | $2000.00 | 20% | _____ |
| 6. car | $13,456.00 | 5% | _____ |

7. Anita wants to buy a new car. The down payment required is 12% of the retail price of $6250. What is the down payment?

_____

8. The down payment on Derrick's new pickup truck was 10% of the retail price of $12,500. What is the down payment?

_____

## Borrowing and Lending

# Amount Financed

*Find the amount financed. Write the correct answer on each line.*

AMOUNT FINANCED = CASH PRICE − DOWN PAYMENT

| Item | Cash Price | Down Payment | Amount Financed |
|------|-----------|--------------|-----------------|
| 1. watch | $220.00 | $23.00 | _____ |
| 2. tire | $53.26 | $2.75 | _____ |
| 3. exercise bike | $164.25 | $16.80 | _____ |
| 4. golf clubs | $865.22 | $54.80 | _____ |
| 5. ring | $164.10 | $18.00 | _____ |
| 6. recliner | $350.00 | $27.80 | _____ |

7. Chris wanted to buy a suit costing $285. He gave the clerk $50 for a down payment. How much did Chris have to finance?

_____

8. Malina's fiancé bought an engagement ring for her. The cash price was $450. He made a down payment of $90. What is the amount he had to finance?

_____

2.03-2.04

# Down Payment and the Amount Financed

*Solve each problem below. Write the correct answer on each line. Round to the nearest cent.*

**DOWN PAYMENT = CASH PRICE x PERCENT OF DOWN PAYMENT**

**AMOUNT FINANCED = CASH PRICE − DOWN PAYMENT**

| Item | Cash Price | % of Down Payment | Down Payment | Amount Financed |
|------|-----------|-------------------|--------------|-----------------|
| 1. water skis | $265.00 | 14% | _____ | _____ |
| 2. motorbike | $602.20 | 5% | _____ | _____ |
| 3. computer | $850.00 | 10.5% | _____ | _____ |
| 4. TV | $652.20 | 6% | _____ | _____ |
| 5. clothes | $350.00 | 15% | _____ | _____ |
| 6. bicycle | $262.48 | 8% | _____ | _____ |

7. Chris wants to buy a home gym. The cash price is $2180.95, and a 16% down payment is required. What is the amount of down payment and how much will be financed?

down payment_____

amount financed _____

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# Borrowing and Lending

$

8. Mr. Goldstein purchased a sand drill. The down payment was $35.25. The monthly payments were $18.25 for 12 months. Find the total of the monthly payments and total cost.

    total of monthly payments _____

    total cost _____

9. Angela needs a new lawn mower. She saw one advertised for $429.99. If she makes a 12% down payment, what is the amount she will finance?

    down payment_____

    amount financed _____

10. Stefan needs some major work done on his car. The auto repair shop will finance the repairs, but they require a 20% down payment on the cost of the repairs. If the repairs cost $1500, how much of the cost will Stefan have to fianance?

    down payment_____

    amount financed _____

2.05

# Installment Price

*Solve the problems below. Write the correct answer on each line.*

INSTALLMENT PRICE = DOWN PAYMENT + (MO. PAYMENT X NO. OF PAYMENTS)

| | Monthly Payment | No. of Payments | Total of Monthly Payments | Down Payment | Total Installment |
|---|---|---|---|---|---|
| 1. | $54.20 | 12 | _____ | $135.00 | _____ |
| 2. | $25.30 | 18 | _____ | $50.00 | _____ |
| 3. | $120.00 | 12 | _____ | $250.00 | _____ |
| 4. | $30.50 | 24 | _____ | $150.00 | _____ |
| 5. | $18.75 | 12 | _____ | $52.60 | _____ |
| 6. | $52.50 | 36 | _____ | $521.00 | _____ |
| 7. | $25.50 | 18 | _____ | $140.00 | _____ |
| 8. | $65.80 | 12 | _____ | $120.95 | _____ |
| 9. | $120.52 | 18 | _____ | $215.75 | _____ |
| 10. | $165.20 | 24 | _____ | $1200.00 | _____ |

11. Leslie installed a swimming pool in her yard. The monthly payments were $89.25 a month for 36 months. What was the total installment cost if her down payment was $1500?

total cost _____

## Borrowing and Lending

2.05  $

# Finance Charge

*Solve the problems below. Write the correct answer on each line.*

**AMOUNT FINANCED = CASH PRICE – DOWN PAYMENT**

**FINANCE CHARGE = TOTAL INSTALLMENT PAYMENTS – AMOUNT FINANCED**

| | Cash Price | Down Payment | Total Installment Payments | Finance Charge |
|---|---|---|---|---|
| 1. | $725.00 | $250.00 | $660.00 | _____ |
| 2. | $595.98 | $162.50 | $661.20 | _____ |
| 3. | $798.78 | $85.00 | $747.00 | _____ |

4. Jennifer purchased a computer and software. She put $250 down and made monthly payments of $92.50 for 18 months. The cash price of the computer is $1595. What is the finance charge?

_____

5. Monica bought a new boat with a cash price of $2510.75. The down payment was $350.00, and the total of all monthly payments was $2810.50. What was the finance charge?

_____

6. Angela wanted to buy new dining room furniture. The set she wanted cost $2000. The salesman suggested that she finance the set by putting down $150 and making monthly payments of $87.50 for 24 months. How much would Angela pay in finance charges?

_____

2.06

# Advantages and Disadvantages of Installment Buying

*Solve the problems below. Write the correct answer on each line.*

INSTALLMENT PRICE = MONTHLY PAYMENTS x NUMBER OF PAYMENTS + DOWN PAYMENT

COMPARISON OF PLANS = INSTALLMENT PLAN – CASH PLAN

1.  A dance band needs a 150-watt amplifier which costs $559.95. They can buy it on the installment plan for $140 down an 12 monthly payments of $45. How much will the band save if they pay cash?

    _____

2.  Jim wants to buy a used car which costs $900. He can pay $450 down and make 24 monthly payments of $45. Should Jim pay cash for his car or buy it on the installment plan? Why?

    _____

    _____

    _____

3.  After Juan paid off his loan for the TV set, the salesman at the electronic store talked Juan into buying a new sound system. He told Juan that the payments would be less than the TV set—only $31.19 for 18 months if he made a down payment of $100. Juan decided to pay $600 in cash. Did Juan make a wise decision? Explain your answer.
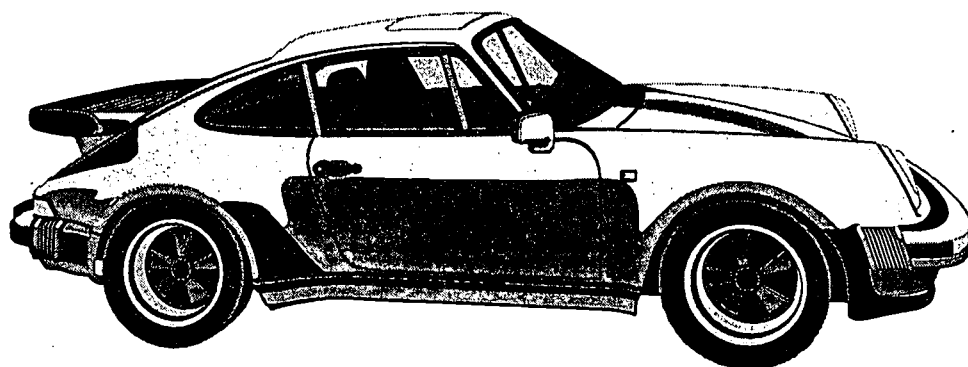
    _____

    _____

    _____

# Purchasing a Car

# Vocabulary

*Study the terms and definitions below.*

## Shopping for a Car

base price ............................. the total price of the engine, chassis, and all other standard equipment for a particular model

*Blue Book* ............................. a book that shows the wholesale and retail value of cars

dealer ..................................... a businessperson who sells cars

dealer's cost .......................... the amount a dealer pays to buy a car from the manufacturer and transport it

destination charge ............... the cost of shipping the car from the factory to the dealer

mileage .................................. the total miles a car has been driven

options ................................... extras added to a car for convenience, safety, or appearance, such as a radio, air conditioning, power steering, and tinted glass

sticker price .......................... the price at which a car is offered for sale to consumers; includes the base price, options, and destination charge

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214
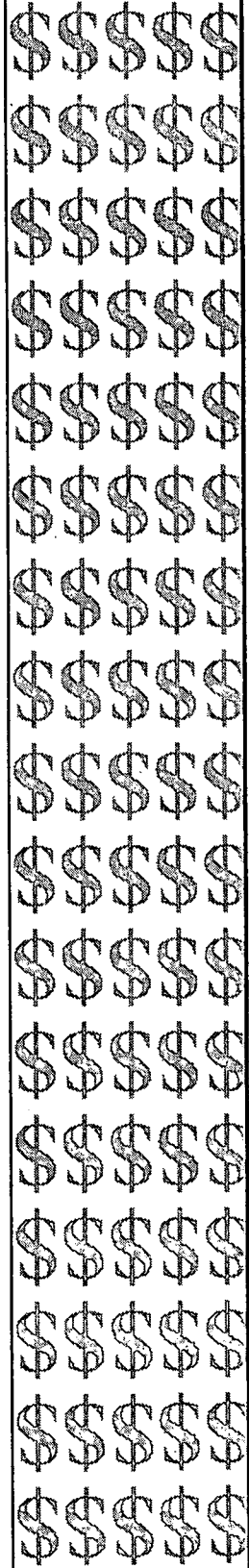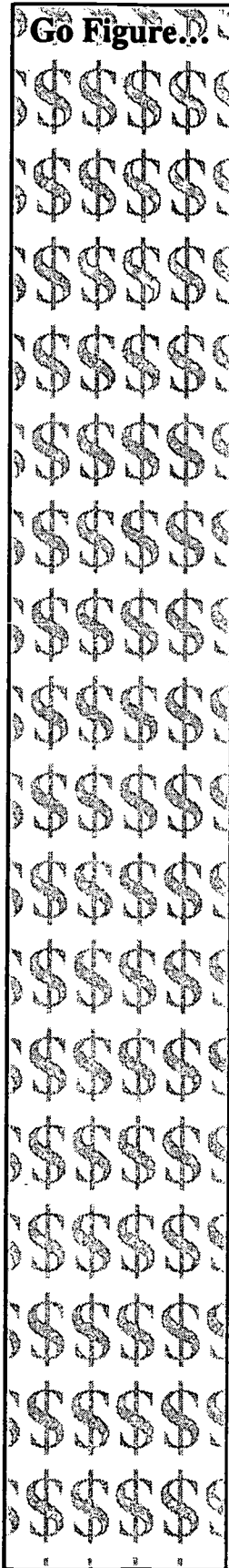
## Car Insurance

**age group** ............................ a category to which an
automobile is assigned by an
insurance company depending
on its age; age group affects the
base premium

**collision insurance** .............. insurance to pay for repairs to
your automobile if it is involved
in an accident

**comprehensive insurance** ... insurance that covers damage to
your automobile caused by fire,
vandalism, theft, etc.

**deductible** ........................... the amount of money paid by the
insured for repairs

**driver-rating factor** ............. a number assigned by an
insurance company to each
driver based on the driver's age,
marital status, and so on; a high
driver-rating factor results in a
higher premium

**insurance-rating group** ....... a category to which an insurance
company assigns an automobile
depending on its size and value;
insurance-rating group affects
the base premium

**liability insurance** ............... insurance that pays for other
people's injuries and property
damage if the insured causes the
accident

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# Purchasing a Car

**premium** ............................... money paid to the insurance
company for insurance

**uninsured motorist coverage** .. insurance that pays for some of
the costs if the insured's car is hit
by an uninsured driver

## Car Operation and Maintenance

**depreciation** ......................... a decrease in the value of an item
because of its age or condition

**estimate** ............................... the approximate cost

**fixed costs** ............................ the costs of operating and
maintaining an automobile that
remain about the same regardless
of the number of miles driven; an
example of a *fixed cost* is
insurance

**maintenance** ......................... the upkeep of a place or thing
(such as a car)

**parts and labor** .................... the sum of the charges for all
new or rebuilt parts and for labor,
or the time it took the mechanic
to make the repairs

**variable costs** ....................... the costs of operating and
maintaining an automobile that
increase as the number of miles
driven increases; gasoline is an
example of a *variable cost*

**Go Figure...**

# Driving For a Deal!

## Shopping for a Car

Gërta has been at college and working part-time for two and a half years now. She has saved $4200, and she is ready to buy her first car. First, she has to decide whether to make a down payment on a new car or to purchase a used car, sometimes called a *previously owned* car.

Gërta talked with her father on the phone about the strategies of buying a car. Then she visited several new car dealerships. One of the first things she noticed was a large piece of paper with prices on it glued to the window of every car. It was the sticker that car manufacturers are required by law to put on the window of every new car. The sticker must show *all* charges for the car.

| C/C | DESCRIPTION | WEIGHT | LIST PRICE |
|-----|-------------|--------|-----------|
| PB1 | VOYAGER PV200 CUSTOM DELUXE | 3164 | 9152.00 |
| B89 | STARLIGHT BLUE METALLIC | | 0.00 |
| CBLU | BENCH SEATS - VINYL | | 0.00 |
| 034 | AUTOMATIC TRANSMISSION | | 510.00 |
| F26 | 255 CID V6 - 288L | 23 | 258.55 |
| 611 | AIR CONDITIONING | 95 | 366.00 |
| HS1 | TINTED GLASS | | 151.00 |
| S11 | POWER STEERING | 41 | 491.95 |
| V3W | CD PLAYER/STEREO | | 298.00 |
| Y62 | TIRES - 618 X 14 WHITE SIDEWALL | | 198.00 |
| 309 | DESTINATION CHARGE | | 375.00 |

The list on the sticker began with the *base price*—the price of the engine, the chassis, and all other standard equipment for a particular model. Also on the sticker was a list of *options*. *Options* are extras added to the car for convenience, safety, or appearance, such as a radio, air conditioning, power steering, and tinted glass. There was also a **destination charge,** or the cost of shipping the car from the factory to the **dealer.** At the

very bottom of the list was the *sticker price* for the car—the price that consumers would have to pay for the car. The *sticker price* is the total of the base price, options, and the destination charge.

**You Try!**

Use the **Go Figure...** area for any calculations.

**Gërta was trying to understand the numbers posted on the sticker of one car. Using the new car sticker above, help Gërta determine how the dealer arrived at the sticker price.**

STICKER PRICE = BASE PRICE + TOTAL OPTIONS + DESTINATION CHARGE

STICKER PRICE = $9752 + _____ + $375

STICKER PRICE = _____

Gërta remembered her father explaining that the dealer pays much less for a car than the price on the sticker. He pays less than the base price and less for the options. The **dealer's cost** is only a percentage of the sticker price. The dealer doesn't tell his percentage, but many consumer magazines often report the dealer's cost. Gërta's father told her that with this in mind, she might make an offer to the dealer that is *higher* than his cost, but *lower* than the sticker price. Gërta was not sure that she could bargain well, but it was worth a try.

## Go Figure...

## You Try!
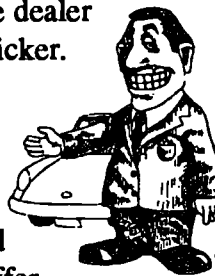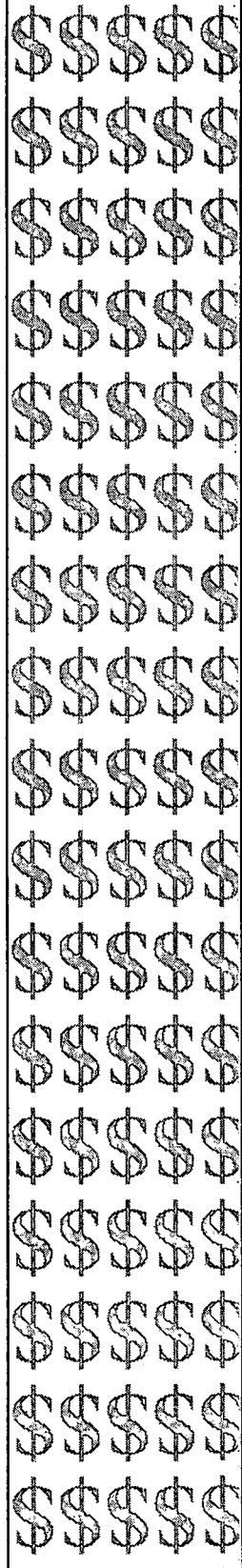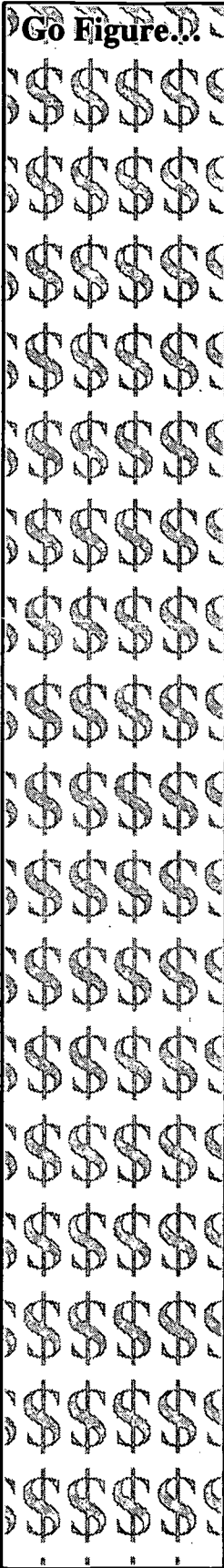
Use the **Go Figure...** area for any calculations.

Gërta decided that she would do a little homework on car shopping. She bought the car issue of *Consumer Reports* magazine. She studied the "car buying" section. She saw that the dealer's cost for the car she was interested in was about 80% of the base price and 77% of the options price. The car she was interested in had a base price of $6352, options totaling $1387.40, and a destination charge of $225. What should Gërta estimate the dealer's cost to be?

Dealer's Cost = Dealer's Base Price + Dealer's Options Price + Destination Charge

Dealer's Cost = (.80 x 6352) + (.77 x 1387) + $225

Dealer's Cost = $_____ + $_____ + $225

Dealer's Cost = $_____

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# Purchasing a Car

## Financing a Car

Gërta was excited about her bargaining
power. Now she needed to think about
her ability to pay for a car. She knew
that $4200 would not be nearly enough to
pay for a new car. However, her savings would make a good
down payment on a new car. But Gërta didn't know if the
monthly car payments would be within her budget.

Speaking with a bank officer, Gërta learned that when making
a car loan or financing a car, the down payment is subtracted
from the price of the car. The amount remaining is paid off in
monthly payments. The amount of each monthly payment
would be determined by the number of months Gërta would
choose to pay on her car, usually 12, 24, or 36 months. Her
monthly payment would also depend on the amount of interest
charged on her loan.

Gërta understood that if she financed the car loan with the
bank for 12 months, she would have monthly payments of
$646.38. If she paid it off over 24 months, her payments would
be $320.19, and over 36 months her payments would be
$213.46. Even $213.46 a month seemed too much for her to
afford, so she decided to purchase a used car and not go into
debt. She could
buy a new car
when she
finished college
and had a full-
time job.

She called her
father again to
talk about
buying used
cars. He told

| 1989 HONDA | | | | | |
|---|---|---|---|---|---|
| Body Type | VIN | Wt. | List | Whls. | Sug. Ret. Value |
| **HONDA** | | | | | |
| 1988 HONDA—Use Older Car Guide. See p. 2 | | | | | |
| 1989 HONDA—1G1A(J08C)-D-9 | | | | | |
| Civic—4-Cyl—Equipment Schedule D | | | | | |
| W.B.94.3', 97.3' (4D); CID 98. | | | | | |
| Hatchback 2D | J08C | 1971 | 7785 | 3699 | 3900 |
| Hatchback 4D | J68C | 2040 | 8101 | 3975 | 4090 |
| Hatchback Coupe 2D | B08C | 2029 | 8033 | 3175 | 4125 |
| Hatchback Coupe 4D | B68C | 2090 | 8180 | 3250 | 4225 |
| 4-Cyl. Diesel Engine | D | — | — | (575) | (635) |

her that car dealers usually advertise used cars for prices that
are higher than what they expect consumers to pay. He told her
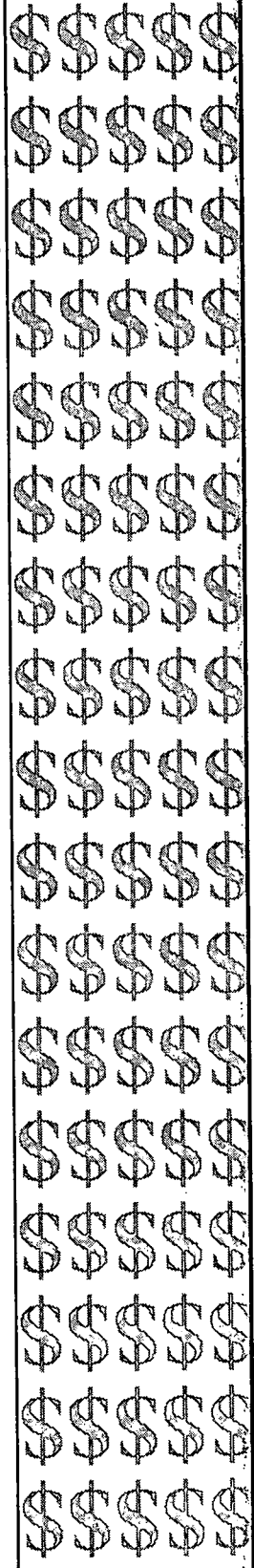
**Go Figure...**
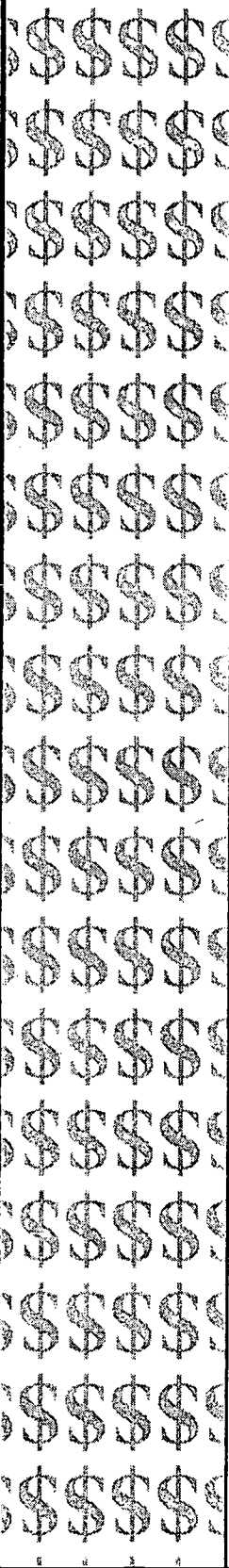
that she needed to get a source of information, such as the *Blue Book*. The *Blue Book* is a publication that gives price information on used cars. It can usually be found at the library or a local bank.

The *Blue Book* gives two prices on each car. Dealers usually buy used cars at the *wholesale price* listed in the *Blue Book*. Dealers usually sell used cars at the *suggested retail value* listed in the *Blue Book*. The dealer's wholesale price is called the *low-book price*. This retail price of the car is called the *high-book price*. The *Blue Book* is especially helpful when considering the purchase of a used car. It lists the year, make, and model of a car, along with the model number, weight, and original price, or list price.

| 1989 Honda Equipment Schedule D | | | | |
|---|---|---|---|---|
| Av'g Trd-In | BODY TYPE | Model | Wht. | Sug. Ret. Value |
| CIVIC—V4-MT-AFST-AC | | | | |
| 3500  4 | H'dtp 2Dr | J06C | 3000 | 3900 |
| 3545  4 | H'dtp "S" | J66C | 3075 | 4000 |
| 3600  4 | H'dtp Sprt | B06C | 3175 | 4125 |
| 50 | Add Vinyl Top | | 50 | 100 |
| 100 | Add Sun Roof | | 100 | 150 |
| 50 | Add Tape Deck | | 50 | 100 |
| 50 | Add AM/FMStereo | | 50 | 100 |
| 50 | Add AM/FM Ster/Tpe | | 50 | 100 |
| 50 | Add Power Seats | | 50 | 100 |
| 50 | Add Power Windows | | 50 | 100 |
| 50 | Add Turbine Wheels | | 50 | 75 |
| 225 | Deduct Man. Trans. | | 225 | 225 |
| 275 | Deduct w/o Air Cond. | | 275 | 275 |
| 350 | Deduct Mileage 75,000–80,000 | | 350 | 350 |

Gërta was particularly interested in a sporty, little 1989 Honda Civic that she had seen. Gërta used the *Blue Book* listing to figure out what she should offer for that particular car. She first found the suggested retail price of the car listed on the right side of the page. The dealer had priced this car higher than the *high-book price*. She decided not to buy the car unless the dealer was willing to lower his price.

In one of the consumer magazines, Gërta found a formula for finding the *fair retail price* of a used car. (This formula is listed in the exercise on the next page.)

## Purchasing a Car

**You Try!**

Refer to the partial *Blue Book* pages on the previous pages to find a fair price. Use the **Go Figure...** area for any calculations.

> **The 1989 Honda Civic Hatchback Coupe 2D that Gërta liked was advertised for $5278. It had a sun roof, AM/FM stereo radio/cassette player, air conditioning, a manual transmission, and had been driven 76,000 miles. What should Gërta offer for the car?**

FAIR RETAIL PRICE = (SUGGESTED RETAIL VALUE + ADDITIONAL OPTIONS) − (OPTIONS DEDUCTIONS + MILEAGE DEDUCTION)

FAIR RETAIL PRICE = ($4125 + $150 + $100) − ($225 + $350)

FAIR RETAIL PRICE = ($4125 + _____ ) − _____

FAIR RETAIL PRICE = $4375 − $575

FAIR RETAIL PRICE = _____

Now Gërta could bargain with the dealer. If she is able to buy the car at the *Blue Book* price, she will even have money left in her savings account. She was excited about her new-found knowledge.

*Time for some practice!*

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8.01

# Financing a Car

*Solve the problems below. Write the correct answer on each line.*

FINANCE CHARGE = TOTAL OF MONTHLY PAYMENTS − AMOUNT OF LOAN

TOTAL OF MONTHLY PAYMENTS = AMOUNT OF MONTHLY PAYMENTS x NUMBER OF PAYMENTS

| | Total of Monthly Payments | Amount of Car Loan | Finance Charge |
|---|---|---|---|
| 1. | $12,450.23 | $9995.95 | _____ |
| 2. | $9048.05 | $8225.50 | _____ |
| 3. | $13,925.00 | $10,425.99 | _____ |
| 4. | $8475.00 | $7500.00 | _____ |
| 5. | $7200.00 | $6345.75 | _____ |

6. Judy bought a pre-owned car for $850. She made monthly payments of $79.50 for a year. What was her finance charge?

_____

7. Tom's car cost $4848. He made monthly payments for 24 months. What was the total amount of each payment?

_____

8. Bud financed his new Mustang for 36 months at $425 a month. What was Bud's finance charge if the selling price of the car was $13,990.00?

_____

# Insurance?...Sure!

## Car Insurance

Gërta was so excited about her decision to buy a used car that she almost forgot about car insurance. She had not figured the cost of insurance into the cost of the car. In most states, it is against the law to drive without **liability insurance**, so she didn't have much choice. She would need insurance to protect herself and others in case of an accident. She could also buy insurance to protect her car when she was not in it.
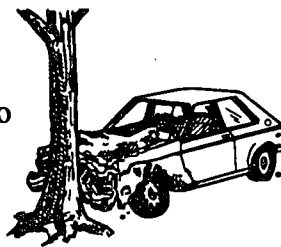
There are different kinds of car insurance that Gërta had to consider in her decision. These kinds of insurance are generally referred to as *coverage*—protection against the costs of accidents, theft, or other risks.

- **Liability insurance** would pay for *bodily injury* to other people and *property damage* if she caused the accident.

- **Collision insurance** would pay for the repair of her car if it was involved in an accident.

- **Comprehensive insurance** would cover damage to the car from such things as fire, flood, vandalism, theft, etc.

- **Uninsured motorist coverage** would pay for some of her medical costs if an uninsured driver hit her car.

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**Go Figure...**

Gërta decided to *shop* for the best insurance at the lowest price. She would compare the **premium**, or rate, that different companies charge for insurance. She called several insurance companies and asked each one about its rates. The insurance agents asked her some questions to determine what her base premium would be. The agents need to have information about the driver to find the **driver-rating factor**. The higher the driver-rating factor, the higher the cost of the insurance premium.

**Driver**

- Are you insured now?
- How old are you?
- Have you had any traffic tickets or accidents during the past five years?
- Are you single or married?

The insurance agents explained to Gërta the many choices she had. Gërta understood that the more coverage she had, the higher her premium would be. But more coverage would give her more protection. The insurance agents showed Gërta the tables they use to determine the annual premium. Gërta chose the insurance company with the lowest premiums for the coverage she wanted.

The *liability* table on the next page shows the limits the company would pay and the cost of different amounts of coverage for *bodily injury* and *property damage*. For example, a bodily-injury limit of 25/100 means that the insurance company will pay up to $25,000 to any one person injured but no more than $100,000 regardless of how many persons are injured.

**My coverage EXPIRED!!!**

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# Purchasing a Car

| LIABILITY | | | | |
|---|---|---|---|---|
| PROPERTY DAMAGE LIMITS | BODILY INJURY LIMITS | | | |
| | 15/30 | 25/100 | 50/100 | 100/300 |
| $10,000 | 93.20 | 104.00 | 109.20 | 120.00 |
| $25,000 | 97.20 | 108.00 | 113.20 | 124.00 |
| $50,000 | 100.00 | 111.20 | 116.00 | 127.20 |

**You Try!**

Refer to the insurance table above to follow the steps below. Use the Go Figure... for any calculations.

**Gërta's driver-rating factor is 1.95. Her liability coverage includes 15/30 bodily injury, and her property damage coverage is $10,000. What is her annual liability premium for property damage and bodily injury?**

ANNUAL LIABILITY PREMIUM = ANNUAL BASE PREMIUM x DRIVER-RATING FACTOR

ANNUAL LIABILITY PREMIUM = $93.20 x 1.95

ANNUAL LIABILITY PREMIUM = $_____

Gërta learned that the kind of car she was insuring also affected the annual base premium. The car's age, value, use, location, and the probability of its being stolen would place it in an *insurance-rating group* and *age group*. The agent would use these categories to find the rates in different tables. The agent asked Gërta more questions about her car and showed her another table used to determine her annual base premium.

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- What kind of car do you drive?
- How far do you drive to work or school?
- Will you be the only driver?
- Where do you live?

| COVERAGE | Age Group | Insurance Rating Group | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1—5 | 6 | 7 | 8 | 9 | 10 |
| Full comprehensive | A | $19.60 | 22.00 | 26.00 | 32.40 | 45.60 | 58.40 |
| | B | $16.40 | 18.40 | 22.00 | 27.60 | 38.80 | 49.60 |
| | C | $14.80 | 16.40 | 19.60 | 24.40 | 34.40 | 44.00 |
| | D | $12.80 | 14.40 | 16.80 | 21.20 | 29.60 | 38.00 |
| Collision $50 deductible | A | $92.00 | 97.20 | 108.00 | 124.40 | 140.40 | 156.80 |
| | B | $78.40 | 82.80 | 92.00 | 105.60 | 129.20 | 133.20 |
| | C | $69.20 | 72.80 | 81.20 | 93.20 | 110.20 | 117.60 |
| | D | $55.20 | 58.40 | 64.80 | 74.80 | 84.40 | 94.00 |

Another variable that would determine the amount that Gërta would pay for insurance was the **deductible** she chose. If she chooses a higher *deductible*—the amount of money she must pay for repairs or injuries before the insurance company pays—then her insurance cost will be lower.

**You Try!**

Refer to the insurance table on the previous page to find the amounts. Use the **Go Figure...** area for any calculations.

**Gërta's car is in age group D and insurance-rating group 4. If Gërta chooses full comprehensive coverage and $50-deductible collision insurance, what will her annual base premium be?**

# Purchasing a Car

ANNUAL BASE PREMIUM = COMPREHENSIVE PREMIUM + COLLISION PREMIUM

ANNUAL BASE PREMIUM = $12.80 + $55.20

ANNUAL BASE PREMIUM = $_____

> With Gërta's driver-rating factor of
> 1.95, what will her annual premium
> for full comprehensive coverage and
> $50-deductible collision insurance be?

ANNUAL PREMIUM = ANNUAL BASE PREMIUM x DRIVER-RATING FACTOR

ANNUAL PREMIUM = $68.00 x 1.95

ANNUAL PREMIUM = $_____

> Using the insurance tables on page 143
> and 144, and information from
> previous work, compute Gërta's total
> annual insurance premium.

ANNUAL INSURANCE PREMIUM = ANNUAL LIABILITY PREMIUM FOR BODILY INJURY AND PROPERTY DAMAGE + ANNUAL PREMIUM FOR COMPREHENSIVE AND COLLISION

ANNUAL INSURANCE PREMIUM = $_____ + $_____

ANNUAL INSURANCE Premium = $_____

*Time for some practice!*

145

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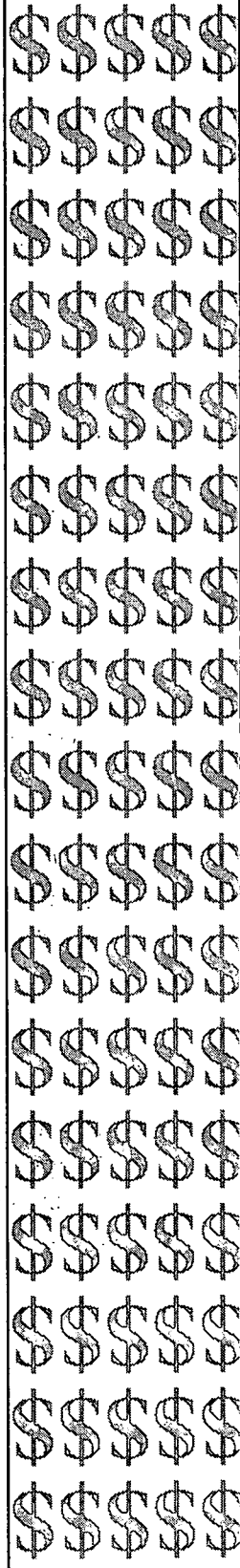
**8.04**

# Cost of Car Insurance

*Use the charts on pp. 143 and 144 to solve the problems below. Write the correct answer on each line.*

ANNUAL PREMIUM = ANNUAL BASE PREMIUM x DRIVER-RATING FACTOR

| | Property Damage | Bodily Injury | Annual Base Premium | Rating Factor | Annual Premium |
|---|---|---|---|---|---|
| 1. | $10,000 | 15/30 | _____ | 1.80 | _____ |
| 2. | $25,000 | 50/100 | _____ | 3.10 | _____ |
| 3. | $50,000 | 25/100 | _____ | 1.45 | _____ |
| 4. | $25,000 | 25/100 | _____ | 1.15 | _____ |

5. Jane drives to and from work. She has 25/100 bodily injury and $50,000 property damage insurance coverages. Her driver-rating factor is 1.95. What is her annual premium?

_____

6. Antoine is single, 24 years old, and drives a delivery van for Office Supplies, Inc. He has full comprehensive and $50-deductible collision coverages. The van is in age group B and rating group 8. Antoine's driver-rating factor is 3.10. What is Antoine's annual premium?

_____

# Upkeep? Keep Up What?

## Car Operation and Maintenance

Once she included her annual insurance premium in the cost of owning a car, Gërta saw her decision to pay cash for a used car as a wise one. Now she had to keep her car running well. To reduce the chances of her car breaking down, she needed to check the fluids and change the oil in her car every 3000 miles. Her father suggested that when she changed the oil in her car, she record the mileage shown on the odometer. Keeping a record of her car maintenance would help her to keep down the cost of repairs.

Gërta could remember her father taking the family car in for repairs. He knew most of the mechanics in town and always took his car to the garage he thought was the most reliable. She decided to shop around to find a reliable mechanic close to the college. Gërta also remembered that her father always asked the mechanic for an estimate—the cost to fix the car. Her father made sure that the mechanic

**BERNIE'S**
Auto Parts and Repairs
11203 Running Bird Highway
704-5793

| NAME | Richard Schmidt |
|---|---|
| ADDRESS | 3124 Scenic View Dr |
| CITY | Miami |

| AMT. | NAME OF PART | SALE AMOUNT | DATE 12/15/92 | ORDER NO. | WHEN PROMISED 12/17 | PHONE NO. 555-2149 |
|---|---|---|---|---|---|---|
| 1 | Oil Filter | 7.65 | YEAR & MAKE OF CAR TYPE OR MODEL | ESTIMATE | SERIAL NO. | |
| 1 | Fuel Filter | 5.35 | '85 Custom Corsair | $235 | MOTOR NO. | |
| 4 | Spark Plugs | 10.00 | | | | |
| | Brake Fluid | 6.00 | LICENSE NO. 999-LLK | MILEAGE 108,795 | WRITTEN BY Tom | |
| 1 | Thermostat | 4.85 | | | | |

| DESCRIPTION OF WORK | AMOUNT |
|---|---|
| Major tune, Replace Fluids | 148 00 |
| Replace Thermostat | |
| | |
| Check Clutch System | |
| Install Clutch Master | 54 00 |
| Install Clutch Slave | 36 00 |

| TOTAL PARTS | 33 85 | GAS, OIL & GREASE | CHECK BELOW | LABOR ONLY | 238 00 |
|---|---|---|---|---|---|
| | | LBS. GR. | | PARTS | 33 85 |

ESTIMATES ARE FOR LABOR ONLY, MATERIAL ADDITIONAL

| | LBS. GR. | | LUBRICATE | |
|---|---|---|---|---|
| | GALS. GAS | | ENGINE OIL | |
| | QTS. OIL 8 qts/.40 | 11 50 | TRANS. | GAS, OIL & GREASE 11 50 |
| | TOTAL GAS, OIL, & GREASE | 11 50 | TOTAL SERVICE | TAX 2 20 |

I HEREBY AUTHORIZE THE ABOVE REPAIR WORK TO BE DONE ALONG WITH NECESSARY MATERIALS
AUTHORIZED BY *Richard Schmidt*   TOTAL 285 55

called him to get permission to make any repairs costing more than the estimate.
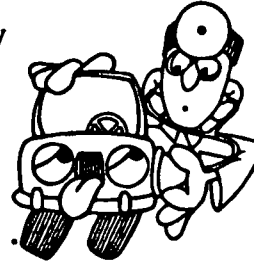
The repair bill that her father received had seemed hard to read. She noticed the personal information of the car owner at the top of the bill. The bill also showed the date, the mileage, and other information about the car.

The charges seemed to be divided between **parts and labor.** The left side of the bill listed the *parts* that were needed to repair the car. The labor, or the mechanic's time, was listed on the right side. At the bottom of the bill was a box that read *Authorized by.* This was signed by the person who gave permission for the repairs to be made.

**You Try!**

Refer to the repair bill on the previous page to answer the following questions. Use the **Go Figure...** area for any calculations.

1. What model of car is being repaired? _____

_____

2. How many miles did the car have on it when it was

brought in for repair? _____

3. Who authorized the work to be done?

_____

# Purchasing a Car
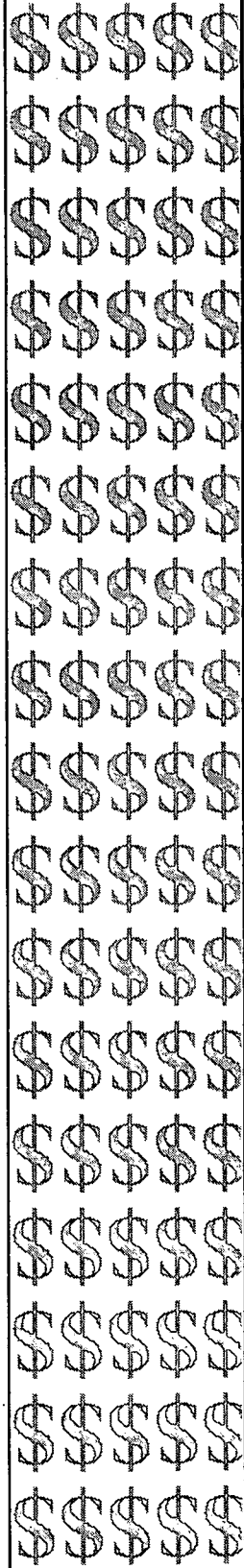
4. How much of the repair bill was for the cost of car

   parts?_____

   How much was for labor?_____

   Which was higher, the cost of parts or labor? _____

   How much higher? _____

5. How much tax was added to the total cost of the repair

   job? _____

Gërta knew that some of the costs of maintaining her car would be **variable costs**. *Variable costs* are the costs of operating and maintaining a car that vary depending on the number of miles driven. The more miles Gërta drove the car, the more oil changes, gasoline, and tires would cost.

Some of the costs for operating a car would be **fixed costs**. *Fixed costs* are the costs of operating and maintaining a car that remain the same regardless of the number of miles driven. Gërta knew two of those costs—her insurance premium and the car license tag and registration. She was very glad that she would not have to include loan payments in those fixed costs.

However, there was one fixed cost that Gërta did not take into consideration—the **depreciation** of her car. *Depreciation* is a decrease in the value of an item because of its age or condition. The total depreciation on a car is the difference between its original cost and its present trade-in value. Although Gërta would not have to pay money for depreciation, she learned that if she ever sold her car, she would not get back the original price of the car.

**Go Figure...**

**You Try!**

The 1989 Honda Civic that Gërta purchased at $5278 originally sold for $8995. Five years later the present value of the car according to the *Blue Book* is $4025. How much has her car depreciated?

TOTAL DEPRECIATION = ORIGINAL PRICE – TRADE-IN VALUE

TOTAL DEPRECIATION = $8995 – $4025

TOTAL DEPRECIATION = $_____

Gërta wants to find out how much her car will depreciate every year, or the average annual depreciation. Using the information above, find the average annual depreciation for the car that Gërta purchased.

AVERAGE ANNUAL DEPRECIATION = TOTAL DEPRECIATION ÷ AGE OF CAR

AVERAGE ANNUAL DEPRECIATION = $4970 ÷ 5

AVERAGE ANNUAL DEPRECIATION = _____

Now Gërta has all of the information that she needs to determine the approximate cost to operate and maintain her car. She needs to put some things on paper. She needs to list what she thinks her *variable*, or changing, *costs* will be. Then she

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needs to list the *fixed costs*—those that will not change. She figured that, if she drove her car to school, to work, and around town, she would put about 7500 miles on her car per year.

| Variable Costs | | Fixed Costs | |
|---|---|---|---|
| Gasoline | $670.00 | Insurance | $249.74 |
| Oil | 45.00 | License/Reg. | 45.00 |
| Maintenance | 132.85 | Depreciation | 150.00 |
| New tires | 150.00 | | 444.74 |
| | 997.85 | | |

**You Try!**

Refer to the information and lists above to follow the steps below. Use the **Go Figure...** area for any calculations.

> **How much will it cost Gërta per mile to operate and maintain her car for one year? Round answer to the nearest cent.**

COST PER MILE = (ANNUAL VARIABLE COST + ANNUAL FIXED COST) ÷ NUMBER OF MILES

COST PER MILE = ($997.85 + $444.74) ÷ 7500

COST PER MILE = $_____

*Time for some practice!*

**8.02**

# Cost of Operating a Car

*Solve the problems below. Write the correct answer on each line. Round the answers to the nearest cent.*

COST PER MILE = (VARIABLE COSTS + FIXED COSTS) + MILES DRIVEN

| | Variable Costs | Fixed Costs | Total Costs | Miles Driven | Cost Per Mile |
|---|---|---|---|---|---|
| 1. | $325.00 | $621.50 | $946.50 | 9000 | _____ |
| 2. | $480.00 | $952.17 | _____ | 11,500 | _____ |
| 3. | $843.50 | $695.95 | _____ | 6000 | _____ |

4. Sam drove his car 18,500 miles last year. Fixed costs were $327.54 and variable costs totaled $826.55. What was the cost per mile for Sam to operate his car last year?

   _____

5. Gloria's car gets 25 miles per gallon of gas. She drove the car 875 miles one month. If gas costs $1.19 a gallon, how much did she spend on gas?

   _____

6. Shakay's fixed and variable costs for last year on her car were $1234.25. If she drove a total of 10,000 miles, what were her costs per mile?

   _____

7. A car used 12 gallons of gas to travel 420 miles. How many miles did the car average per gallon?

   _____

235

8.02 $

# Fixed and Variable Costs

*Write **F** if the item is a Fixed Cost and **V** if the item is a Variable Cost. Write the correct answer on each line.*

_____ 1. tires

_____ 2. insurance

_____ 3. gasoline

_____ 4. oil change

_____ 5. brake shoes

_____ 6. new radiator

_____ 7. tag registration

_____ 8. depreciation

**8.03**

# Annual Depreciation

*Solve the problems below. Write the correct answer on each line.*

TOTAL DEPRECIATION = ORIGINAL PRICE − TRADE-IN VALUE

AVERAGE ANNUAL DEPRECIATION = TOTAL DEPRECIATION ÷ NUMBER OF YEARS
YOU KEEP CAR

RATE OF DEPRECIATION = AVERAGE ANNUAL DEPRECIATION ÷ ORIGINAL COST

| | Original Price | Years | Trade-In Value | Average Annual Depreciation |
|---|---|---|---|---|
| 1. | $16,900 | 5 | $4000 | _____ |
| 2. | $9400 | 3 | $3700 | _____ |
| 3. | $10,700 | 4 | $3780 | _____ |

4. Connie's car is two years old and has a book value of $5500. If she purchased the car for $9995, what is the amount of depreciation?

    amount of depreciation _____

5. Billy Ray's pickup truck cost $14,000 and is three years old. The book value is now $8000. What is the rate of depreciation per year? Round the answer to the nearest whole percent.

    rate of depreciation _____

6. Jamie's Corvette, which she paid $35,000 for, is expected to have a book value of $20,000 in three years. What is the total depreciation? What is the average annual depreciation?

    depreciation total _____

    average annual depreciation _____

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- - - - - Cut here and give the certificate to your employer. Keep the top portion for your records. - - -

Form **W-4** | **Employee's Withholding Allowance Certificate** | OMB No. 1545-0010
Department of the Treasury
Internal Revenue Service | ▶ For Privacy Act and Paperwork Reduction Act Notice, see reverse. | **1994**

| 1 Type or print your first name and middle initial | Last name | 2 Your social security number |

| Home address (number and street or rural route) | 3 ☐ Single ☐ Married ☐ Married, but withhold at higher Single rate. |
| | Note: If married, but legally separated, or spouse is a nonresident alien, check the Single box. |
| City or town, state, and ZIP code | 4 If your last name differs from that on your social security card, check here and call 1-800-772-1213 for more information.......▶☐ |

5 Total number of allowances you are claiming (from line G above or from the worksheets on page 2 if they apply) | **5** |
6 Additional amount, if any, you want withheld from each paycheck............................................................. | **6** | $
7 I claim exemption from withholding for 1994 and I certify that I meet BOTH of the following conditions for exemption:
    • Last year I had a right to a frefund of ALL Federal income tax withheld because I had NO tax liabilitiy; AND
    • This year I expect a refund of ALL Federal income tax withheld because I expect to have NO tax liability;
If you meet both conditions, enter "EXEMPT" here...........................................▶ | **7** |

Under penalties of perjury, I certify that I am entitled to the number of withholding allowances claimed on this certificate or entitled to claim exempt status.

**Employee's signature**▶ | Date ▶ | , 19

| 8 Employer's name and address (Employer: Complete 8 and 10 only if sending to the IRS) | 9 Office code (optional) | 10 Employer identification number |

Cat. No. 10220Q

# Paying Your Taxes

# Paying Your Taxes
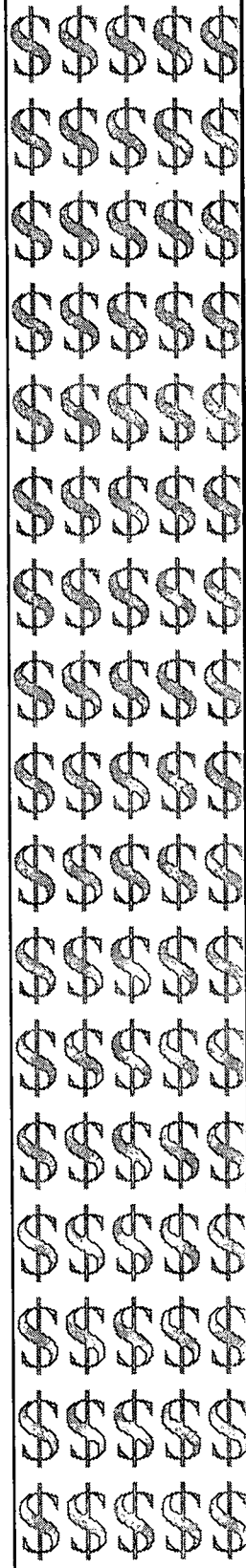
## Vocabulary

*Study the terms and definitions below.*

### Paying Your Share

allowances ............................... number of persons a worker claims as dependent on his or her wages; also called *exemptions*

Form W-2 (Wage and
Tax Statement) .................... a form workers receive that reports the amount of money they earned, the amount of their earnings withheld for social security (FICA), and the amount withheld for federal income tax and state income tax; used by taxpayers to figure their income tax

Form W-4 (Employee's
Withholding Allowance
Certificate ............................ federal form on which workers show the number of allowances (or exemptions) they claim; used in determining taxes withheld from paycheck

filing status ......................... the marital state of the person filing an income tax return

gross pay .............................. total amount of money a worker earns before deductions

**Go Figure...**

net pay ................................ amount of money a worker receives after taxes are withheld and personal deductions are subtracted from gross pay; also called *take-home pay*

Social Security ..................... a tax paid by workers to provide various benefits including hospitilization for persons over 65 and income for those retired

taxable income ..................... money earned that can be taxed by federal, state, and local governments

withholding tax ................... a deduction from a worker's pay for income tax

## Oh, No, It's That Time Again!

balance due ......................... the amount of money owed to the Internal Revenue Service if the taxpayer's income tax is greater than the tax withheld from earnings

Form 1040 ........................... a federal income tax form used when a person's income and taxes must be itemized or involve special situations; also called the *long form*

Form 1040A ......................... a federal income tax form used when a person's income was all from wages, salaries, or tips, and with less than $400 in interest and dividends; also called the *short form*

# Paying Your Taxes

**Form 1040EZ** ...................... an income tax form used when a person is single with no dependents and earns less than $40,000 with interest income of $400 or less

**individual income tax** ........... a federal, state, or local tax on income earned by persons, rather than by corporations or businesses

**revenue** ............................... money that is made by a government through taxes and other sources

**tax liability** .......................... the amount of income tax the taxpayer must pay

**tax refund** ........................... the money returned to a taxpayer when the tax liability is less than the tax withheld

## Taking Care of the Little Things

**adjusted gross income** ........ a tax term meaning gross income less adjustments

**deductions** ........................... allowable expenses which may be subtracted from taxable income

**income tax return** ............... a form showing how much income tax is owed to federal, state, or local government

# Paying Your Share

### Filing Income Taxes

Stefan Standriff saw a way to turn his knowledge of taxes into a money maker. He began offering to tutor his fellow students on how to understand and fill out their tax forms. April 15th of each year is the day federal income tax returns must be postmarked. As that day grew near, Stefan's phone began to ring constantly. When he had as many students as his little apartment could hold, he began teaching his course on filing income tax returns.
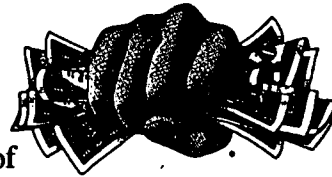
Most of the students knew very little about the federal agency that collects taxes. The Internal Revenue Service (IRS) also checks the computation on tax returns to be sure the amount of tax paid is accurate. Stefan explained to his students that by the time his course was over, they should be able to fill out the correct tax forms and figure their correct taxes.

### Withholding Tax and W-4 Form

Stefan, like all good tutors and teachers, started from the beginning. When the students began their jobs, they filled out the **Form W-4**. This federal form is also called the **Employee's Withholding Allowance Certificate**. Form W-4 helps employers determine how much money to withhold from a worker's earnings. The money deducted from paychecks is called a **withholding tax**. This money is sent to the federal, state, or local government as payment on taxes.

On Form W-4, each student claimed a number of **allowances**, or *exemptions.* Exemptions are people who are supported by the student's earnings. A student may claim one allowance if she is the only person dependent on her earnings. She may

# Paying Your Taxes

claim two or more if someone or some other persons are also dependent on her check. The government permits workers to claim fewer allowances than the actual number. So a student may claim none. Employees cannot, however, claim more than the actual number of persons dependent on her earnings.

For each allowance claimed, the employer sets aside a certain amount of money from the check. This amount is not taxed. In a previous year, for example, the amount for each allowance was $20 from earnings paid weekly. Therefore, if a student made $100 a week and claimed one allowance, only $80 of her earnings would be taxed. ($100 – $20 = $80.) On the **taxable income** of $80, the federal government withholds money as payment for different taxes.

The federal government collects a federal income tax on all earned income. This tax is used by the government to pay its expenses. In addition, the government collects a tax for the Federal Insurance Contribution Act (FICA). The government uses this tax, known as **Social Security**, to pay for hospitalization insurance for persons over 65; retirement income; survivor's benefits; and disability benefits.

Stefan asked the students to examine a recent paycheck stub. He directed them to look at the amount each student earned. **Gross pay**, he explained, is the amount each student earned before taxes and other costs were subtracted. Next he directed the students to look at the federal income tax, or the payment made for federal taxes. Next to the federal income tax is FICA, or Social Security payment. In some states a state tax is charged and will be listed on the paycheck stub. The State of Florida does not charge income tax for those persons who live and work in Florida. Some students had local taxes, medical insurance, and union dues listed on their stubs. All of these taxes and charges are deducted from the gross pay. The employee receives what is left. This amount is called the *net pay*.
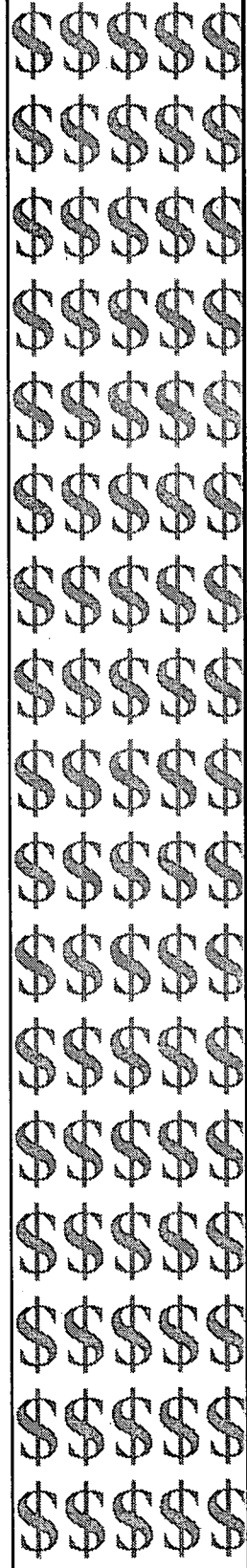
**Go Figure...**

The W-4 Form also asks employees for their **filing status**, or marital status. They can claim one of the following statuses: *Single; Married; or Married but withhold at higher Single rate.*

- - - - - Cut here and give the certificate to your employer. Keep the top portion for your records. - - - - -

| Form **W-4** | **Employee's Withholding Allowance Certificate** | OMB No. 1545-0010 |
|---|---|---|
| Department of the Treasury Internal Revenue Service | ▶ For Privacy Act and Paperwork Reduction Act Notice, see reverse. | **1994** |

| 1 Type or print your first name and middle initial | Last name | 2 Your social security number |
|---|---|---|

| Home address (number and street or rural route) | 3 ☐ Single ☐ Married ☐ Married, but withhold at higher Single rate. Note: If married but legally separated or spouse is a nonresident alien, check the Single box. |
|---|---|
| City or town, state, and ZIP code | 4 If your last name differs from that on your social security card, check here and call 1-800-772-1213 for more information...........▶☐ |

5 Total number of allowances you are claiming (from line G above or from the worksheets on page 2 if they apply)  **5** _____
6 Additional amount, if any, you want withheld from each paycheck....................................................  **6** $ _____
7 I claim exemption from withholding for 1994 and I certify that I meet BOTH of the following conditions for exemption:
 • Last year I had a right to a refund of ALL Federal income tax withheld because I had NO tax liability; AND
 • This year I expect a refund of ALL Federal income tax withheld because I expect to have NO tax liability;
 If you meet both conditions, enter "EXEMPT" here.....................................▶ **7** _____

Under penalties of perjury, I certify that I am entitled to the number of withholding allowances claimed on this certificate or entitled to claim exempt status.

Employee's signature ▶ _____ Date ▶ _____ , 19____

| 8 Employer's name and address (Employer: Complete 8 and 10 only if sending to the IRS) | 9 Office code (optional) | 10 Employer identification number |
|---|---|---|

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Attached to each W-4 Form is a *Personal Allowances Worksheet* to help employees figure the number of exemptions they should claim. See the diagram on the next page.

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# Paying Your Taxes

**Personal Allowances Worksheet**

A  Enter 1 for yourself if no one else can claim you as a dependent................................................................A ____

B  Enter 1 if:
- You are single and have only one job; or
- You are married, have only one job, and your spouse does not work; or
- Your wages from a second job or your spouse's wages (or the total of both) are $1000 or less.  ........... B ____

C  Enter 1 for your spouse. But, you may choose to enter -0- if you are married and have either a working spouse or more than one job (this may help you avoid having too little tax withheld)....................................................C ____

D  Enter number of dependents (other than your spouse or yourself) whom you will claim on your tax return................ D ____

E  Enter 1 if you will file as head of household on your tax return (see conditions under Head of Household above).............E ____

F  Enter 1 if you have at least $1500 of child or dependent care expenses for which you plan to claim a credit.................F ____

G  Add lines A through F and enter total here. Note: This amount may be different from the number of exemptions you claim on your return ▶ G ____

|  | For accuracy, do all worksheets that apply. | - If you plan to itemize or claim adjustments to income and want to reduce your withholding, see the Deductions and Adjustments Worksheet on page 2.<br>- If you are single and have more than one job and your combined earnings from all jobs exceed $30,000, OR if you are married and have a working spouse or more than one job, and the combined earnings from all jobs exceed $50,000, see the Two-Earner/Two-Job Worksheet on page 2 if you want to avoid having too little tax withheld.<br>- If neither of the above situations applies, stop here and enter the number from line G on line 5 of Form 1-4 below. |

----------- Cut here and give the certificate to your employer. Keep the top portion for your records. -----------

**You Try!**

Refer to the *Employee's Withholding Allowance Certificate and the Personal Allowances Worksheet* above to answer the following questions. Use the **Go Figure...** area for any calculations.

1. You are a married, working female whose husband is an unemployed free-lance writer. You are head of household and have at least $1500 of child-care expenses for your two children. No one else claims you as a dependent. On which lines of the *Personal Allowances Worksheet* would you make entries?

   _____

   What would you enter on line **D**? _____

   What would you enter on line **G**? _____

**Go Figure...**

2. You are an architect and no one else claims you as a dependent. Your wife is a fashion designer and she earns $1200 a month. You have no children or other dependents. You file as head of household on your tax return. On which lines of the *Personal Allowances Worksheet* would you make entries?

_____

Explain why this *is* or *is not* the correct personal allowance worksheet for you?

_____

_____

3. On which line of the *Employee's Withholding Allowance Certificate* would you put the total number of allowances that you are claiming?

_____

# Paying Your Taxes

## Form W-2: Wage and Tax Statement

Stefan had asked the students to bring their **Form W-2** to class. This form is also called the **Wage and Tax Statement.** Employers send each worker a W-2 Form shortly after January 1st of each year in which he or she has worked.

The W-2 Form provides employees with some of the information they need to fill out their income tax return. On this federal form is the following information: how much money an employee earned; how much was withheld for Social Security (FICA); how much federal income tax was withheld; and how much state and local tax was withheld.

Some of the students had earned interest on their bank accounts. They received statements with the amount of interest earned from their bank. The federal government taxes earned interest, so this information also must be reported on income tax returns.

### You Try!

Refer to the W-2 Form on the following page to answer the questions. Use the **Go Figure...**area for any calculations.

**One of Stefan's students had a part-time job as a clerk at a sporting goods store. His W-2 form appears on the next page.**
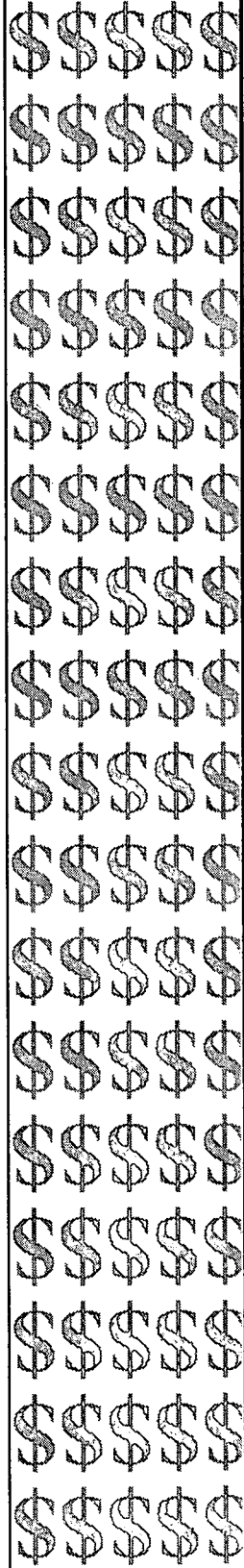
**Go Figure...**

| 2. Employer's State number | | Copy C  For employee's records. | |
|---|---|---|---|
| 3. Employer's name | 4. Subtotal  Correction  Void  ☐ ☐ ☐ | State form number | |
| SPORTSWORLD | 5. Employer's identification number | City form number | |
| | 6. Advance EIC payment | 7. | |

| 8. Employee's social security no. | 9. Federal income tax withheld | 10. Wages, tips, other compensation | 11. FICA tax withheld | 12. Total FICA wages |
|---|---|---|---|---|
| 123-45-6789 | 315.70 | 2255 | 151.09 | |

| 3. Employee's name | | 14. Pension plan coverage? yes/no  NO | 15. * | 16. FICA tips |
|---|---|---|---|---|
| | | 18. State income tax withheld  53.40 | 19. State wages, tips, etc.  2255 | 19. Name of State |
| | | 21. Local income tax withheld | 22. Local wages, tips, etc. | 23. Name of locality |
| 3. Employee's address and zip code | | | | |

**Wage and Tax Statement 19—**

Form W-2

1. How much was he paid in wages and other

   compensation? _____

2. How much was withheld for federal income tax?

   _____

   For FICA? _____

   For state income tax? _____

*Time for some practice!*

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# Paying Your Taxes

7.02

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# W-4 Form

*Use the information given in problem 1 on the next page to complete the W-4 Form and the Personal Allowances Worksheet below for Michael P. Johnson.*

------ Cut here and give the certificate to your employer. Keep the top portion for your records. ------

| Form **W-4** | **Employee's Withholding Allowance Certificate** | OMB No. 1545-0010 |
|---|---|---|
| Department of the Treasury Internal Revenue Service | ► For Privacy Act and Paperwork Reduction Act Notice, see reverse. | 19**94** |

| 1 Type or print your first name and middle initial | Last name | 2 Your social security number |
|---|---|---|

| Home address (number and street or rural route) | 3 ☐ Single ☐ Married ☐ Married, but withhold at higher Single rate. Note: If married, but legally separated, or spouse is a nonresident alien, check the Single box. |
|---|---|

| City or town, state, and ZIP code | 4 If your last name differs from that on your social security card, check here and call 1-800-722-1213 for more information................► ☐ |
|---|---|

5 Total number of allowances you are claiming (from line G above or from the worksheets on page 2 if they apply) **5** _____

6 Additional amount, if any, you want withheld from each paycheck.................................................. **6** $ _____

7 I claim exemption from withholding for 1994 and I certify that I meet BOTH of the following conditions for exemption:
 • Last year I had a right to a refund of ALL Federal income tax withheld because I had NO tax liability; AND
 • This year I expect a refund of ALL Federal income tax withheld because I expect to have NO tax liability;

If you meet both conditions, enter "EXEMPT" here.........................► **7** _____

Under penalties of perjury, I certify that I am entitled to the number of withholding allowances claimed on this certificate or entitled to claim exempt status.

Employee's signature ► _____ Date ► _____ , 19 ___

| 8 Employer's name and address (Employer: Complete 8 and 10 only if sending to the IRS) | 9 Office code (optional) | 10 Employer identification number |
|---|---|---|

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**Personal Allowances Worksheet**

A   Enter 1 for **yourself** if no one else can claim you as a dependent................................................................. A _____

B   Enter 1 if: { • You are single and have only one job; or
 • You are married, have only one job, and your spouse does not work; or
 • Your wages from a second job or your spouse's wages (or the total of both) are $1000 or less. } .................. B _____

C   Enter 1 for your **spouse**. But, you may choose to enter -0- if you are married and have either a working spouse or more than one job (this may help you avoid having too little tax withheld)............................................................... C _____

D   Enter number of **dependents** (other than your spouse or yourself) whom you will claim on your tax return.................... D _____

E   Enter 1 if you will file as **head of household** on your tax return (see conditions under **Head of Household** above)................. E _____

F   Enter 1 if you have at least $1500 of **child or dependent care expenses** for which you plan to claim a credit.............................. F _____

G   Add lines A through F and enter total here. Note: This amount may be different from the number of exemptions you claim on your return ► G _____

For accuracy, do all worksheets that apply. {
 • If you plan to **itemize or claim adjustments to income** and want to reduce your withholding, see the Deductions and Adjustments Worksheet on page 2.
 • If you are **single** and have **more than one job** and your combined earnings from all jobs exceed $30,000, OR if you are **married** and have a **working spouse or more than one job**, and the combined earnings from all jobs exceed $50,000, see the Two-Earner/Two-job Worksheet on page 2 if you want to avoid having too little tax withheld.
 • If **neither** of the above situations applies, **stop here** and enter the number from line G on line 5 of Form 1-4 below. }

------ Cut here and give the certificate to your employer. Keep the top portion for your records. ------

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**7.02**

1. Michael P. Johnson of 105 West 10th Street, Atlanta, Georgia 30128, is single and works a few hours each month at his father's store. He is a full-time student. Michael had no income tax liability last year. He expects to earn between $300 and $400 in wages this year. He has no other income, and his parents claim him as a dependent on their tax return. His Social Security number is 999-42-8030.

2. Eric M. Black of 37 North Main, Bryan, KY 54612, is single and expects to earn about $10,000 this year as a teacher's aide. He earned about $9000 last year and did pay income tax. Eric cannot be claimed as a dependent, and he has no dependents. His Social Security number is 999-00-0721. Complete the form below for Eric.

- - - - - Cut here and give the certificate to your employer. Keep the top portion for your records. - - - - -

| Form **W-4** | **Employee's Withholding Allowance Certificate** | OMB No. 1545-0010 |
|---|---|---|
| Department of the Treasury Internal Revenue Service | ▶ For Privacy Act and Paperwork Reduction Act Notice, see reverse. | **1994** |

| 1 Type or print your first name and middle initial | Last name | | 2 Your social security number |
|---|---|---|---|
| Home address (number and street or rural route) | | **3** ☐ Single ☐ Married ☐ Married, but withhold at higher Single rate. Note: If married, but legally separated, or spouse is a nonresident alien, check the Single box. | |
| City or town, state, and ZIP code | | **4** If your last name differs from that on your social security card, check here and call 1-800-772-1213 for more information...........▶☐ | |

5 Total number of allowances you are claiming (from line G above or from the worksheets on page 2 if they apply) **5** _____

6 Additional amount, if any, you want withheld from each paycheck.................................................................. **6** $ _____

7 I claim exemption from withholding for 1994 and I certify that I meet BOTH of the following conditions for exemption:
- Last year I had a right to a refund of ALL Federal income tax withheld because I had NO tax liability; AND
- This year I expect a refund of ALL Federal income tax withheld because I expect to have NO tax liability;

If you meet both conditions, enter "EXEMPT" here....................................▶ | **7** |

Under penalties of perjury, I certify that I am entitled to the number of withholding allowances claimed on this certificate or entitled to claim exempt status.

Employee's signature ▶ _____    Date ▶ _____ , 19 __

| 8 Employer's name and address (Employer: Complete 8 and 10 only if sending to the IRS) | 9 Office code (optional) | 10 Employer identification number |
|---|---|---|
| | | |

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7.02

# W-2 Form

*Use the form below to answer the following questions. Write the correct answer on each line.*

| | 2. Employer's State number | **Copy C** For employee's records. | |
|---|---|---|---|
| **3.** Employer's name | 4. Subtotal ☐ Correction ☐ Void ☐ | State form number | |
| Scott's Department Store 15 Somerset Lane West Port, NM 88110 | 5. Employer's identification number 10-7056422 | City form number | |
| | 6. Advance EIC payment | 7. | |

| 8. Employee's social security no. | 9. Federal income tax withheld | 10. Wages, tips, other compensation | 11. FICA tax withheld | 12. Total FICA wages |
|---|---|---|---|---|
| 000-00-4327 | 425.00 | 2750.00 | 210.38 | 2750.00 |

| 3. Employee's name Jane W. Winchester | 14. Pension plan coverage? yes/no  NO | 15. | 16. FICA tips |
|---|---|---|---|
| 1560 Fremont Avenue West Port, NM 88110 | 18. State income tax withheld | 19. State wages, tips, etc. | 19. Name of State New Mexico |
| | 21. Local income tax withheld | 22. Local wages, tips, etc. | 23. Name of locality West Port |
| 3. Employee's address and zip code | | | |
| **Wage and Tax Statement 19-94** | | | |
| Form W-2 | | | |

1. How much was withheld for federal income tax? _____

2. What were Jane's gross wages? _____

3. What is her Social Security number? _____

4. Where did Jane work? _____

5. How much was withheld for FICA taxes ? _____

# Oh, No, It's That Time Again!

## Paying Your Share

Stefan was about to show the students how to fill out their tax returns when some of the students began asking some important questions. They wanted to know why we have to pay taxes and to whom we pay taxes? Stefan tried to explain that each tax has a purpose. Our state or federal government collects taxes. These taxes are called *revenue*. Local and state revenue provides benefits such as fire and police protection, schools, roads, and street lights.

Stefan explained that each January, the president of the United States submits a budget to Congress. It is called the *federal budget*. This budget explains where the money will come from and how the money will be spent. The pie graph shows the approximate percent from each dollar in a typical year. For example, 43¢ of every dollar received was from individual income taxes, that would mean that 43% of the total revenue or receipts was from individual income taxes—the taxable income from each person who lives in the U.S.

**Federal Income for Fiscal Year 1992**

Corporate income taxes
7%

Excise, customs, estate, gift, and miscellaneous taxes
7%

Social security, Medicare, and unemployment and other retirement taxes
30%

Personal Income taxes
35%
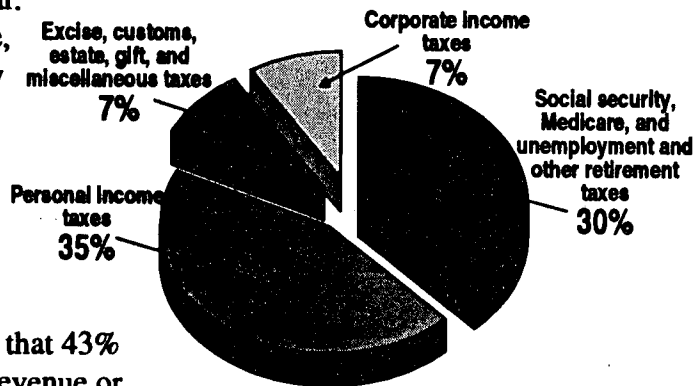
Stefan explained that income taxes were different for each individual. The income tax each person pays depends upon the amount of income the individual earns and the number of exemptions claimed on the IRS Form W-4. All of Stefan's

# Paying Your Taxes

students knew that, by law, individual income taxes must be paid to the federal government by *April 15ᵗʰ* of every year. Each individual must prepare and complete an income tax return, figuring and reporting his or her taxes for the previous year.

First, Stefan explained, each student would have to choose the right income tax form. There are three tax returns individuals can choose to file: **Form 1040EZ; Form 1040A; and Form 1040.**

## Which Form Should I Use?

| Use this form... | If filing status is... | If number of dependents is... | If taxable income is... | If only income is from... |
|---|---|---|---|---|
| **Form 1040EZ** | • Single*<br>• Married filing joint*<br>*must be under age 65 and not blind | No dependents | Only taxable income (line 6) of less than $50,000 | • Wages, salaries, tips<br>• Taxable scholarship and fellowship grants<br>• Interest of $400 or less |
| **Form 1040A** | • Single<br>• Married filing joint<br>• Married filing separately<br>• Head of household<br>• Qualifying widow(er) with dependent child | All dependents that you are entitled to claim | Only taxable income (line 22) of less than $50,000 | • Wages, salaries, tips<br>• Taxable scholarship and fellowship grants<br>• Interest<br>• Dividends<br>• Pensions, annuities, and IRAs<br>• Unemployment compensation<br>• Taxable social security and railroad |
| **Form 1040** | • Single<br>• Married filing joint<br>• Married filing separately<br>• Head of household<br>• Qualifying widow(er) with dependent child | All dependents that you are entitled to claim | Any amount of taxable income (line 37) | • Wages, salaries, tips<br>• Taxable scholarship and fellowship grants<br>• Interest<br>• Dividends<br>• Pensions, annuities, and IRAs<br>• Unemployment compensation<br>• Taxable social security and railroad retirement benefits<br>• Self-employment<br>• Rents and royalties<br>• Taxable state and local income tax refunds<br>• Capital gains<br>• Gain from the sale of your home<br>• Alimony received<br>• All other sources |

**You Try!**
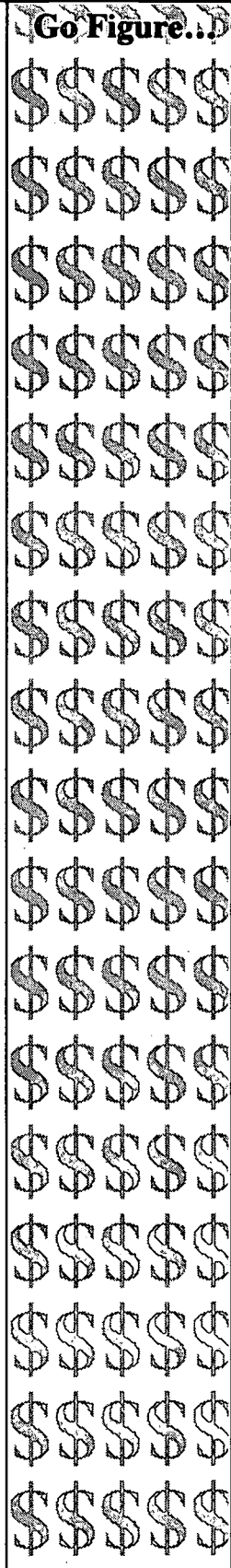
**Go Figure...**

Refer to the chart entitled Which Form on the previous page to answer the following questions.

1. Sharon is a banking executive. She is divorced, has 3 children, owns her home, and makes $105,000/yr.

   What is her filing status? _____

   Which form should she use? _____

2. Sam is 35 years old. He has a 3-yr-old daughter. He earns $45,000/yr. His wife was a captain in the armed services. She was killed in Desert Storm—the 1990 Persian Gulf war.

   What is his filing status? _____

   Which form should he use? _____

3. Kevin is a 20-yr-old in his 2nd year of college. He has been working part-time while in college. Last year he made $5600. His parents still claim him as a dependent.

   What is his filing status? _____

   Which form should he use? _____

Anyone can use Form 1040. However, taxpayers will save time if they are able to use Form 1040EZ or Form 1040A. The form used depends on

- the individual's filing status,
- the number of dependents claimed,
- the individual's taxable income,
- the source of the individual's income,
- whether any adjustments were made to income,

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## Paying Your Taxes

- the number of itemized deductions taken,

- any other taxes that must be paid,

- and the tax credits taken.

Individuals who had filed an income tax return in previous years receive tax packages in the mail. These packets contain the forms and *tax rate schedules* that were right for them based on the tax form they filed the year before. Individuals who don't receive forms in the mail can get the forms and schedules at their local IRS office, a participating bank, the post office, or a participating library. The library usually stocks a wide variety of forms and publications.
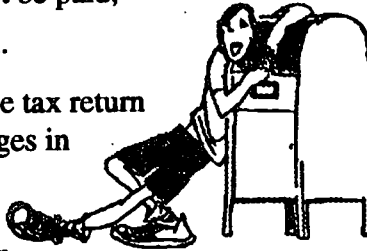
Stefan decided to tutor the students using Form 1040A since it was neither the longest, nor the shortest form. Anyone can use Form 1040A if (1) all income was from wages, salaries, tips, with not more than $400 income from interest or dividends, and (2) there are no itemized deductions. Stefan came up with a list of steps and their corresponding line numbers. (See chart on page 175.)

He started with a sample practice form that was already completed. Then Stefan gave them the information that they needed for filling out lines 17–33 of tax Form 1040A.

- Line **17** is the adjusted gross income from line 16.

- Line **19** is standard deduction for filing status.

- Line **21** is total number of exemptions from line **6e** multiplied by $2350.

- Line **22** is the amount of taxable income.
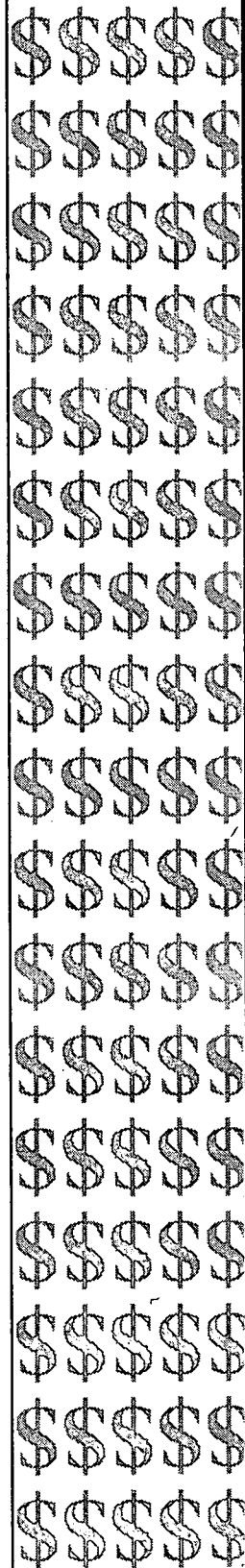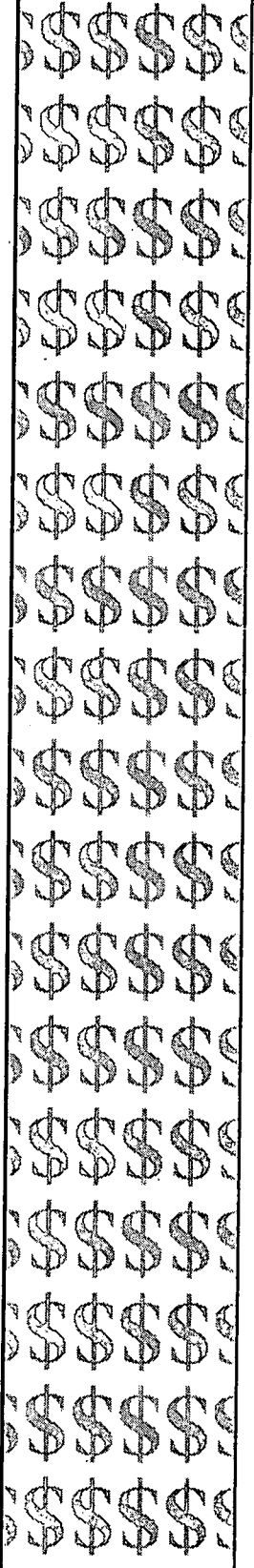
- Line **23** is the amount of tax on the taxable income from line **22**. The amount of tax is from a tax table or from Form 8615.

- Line **28a** is the total amount of federal income tax (FIT) withheld for the year as shown on W-2 forms.

- Line **28d** is the total payments made.

- Line **29** is amount overpaid to IRS if tax credit is greater than tax liability.

- Line **32** is amount owed to IRS if tax liability is greater than tax credit.

The students discussed whether or not the hypothetical person even needed to file a tax return. (They knew that persons earning less than a certain amount of money are not required by law to file a tax return.) But they also knew that if a worker is entitled to a tax refund, he or she must file a return in order to receive the refund. Stefan's tutees came to concensus that they had better work through the tax return form to see if they were going to have a **balance due** or a **tax refund**.

Stefan explained that they would need to compare the **tax liability** to the tax credit. If the tax credit was larger, then they would get a tax refund. If the tax liability was larger, then they would have balance due.

**You Try!**

Use the practice Form 1040A on p. 176 and the given information to answer the following questions on p. 177. Use the **Go Figure...** area for any calculations.

## Go Figure...

### Stefan's Do-It-Yourself Income Tax Return Directions

*Follow the line-by-line, blow-by-blow walk-through below. Should be fairly clear to you. If all else fails, CALL STEFAN!!!*

1. Name, address, and social security number

2. Presidential Election Campaign Fund

3. Check your filing status—lines 1-5
   - (1) Single
   - (2) Married filing joint return
   - (3) Married filing separate return
   - (4) Head of household
   - (5) Qualifying widow(er) with dependent child

4. Figure your exemptions—lines 6a-e
   - (6a) Yourself
   - (6b) Spouse
   - (6c) Dependents
   - (6d) Dependent not at home
   - (6e) Total exemptions claimed

5. Figure your total income—lines 7-14
   - (7) Total income
   - (8a) Taxable income
   - (8b) Tax-exempt interest
   - (9) Dividends
   - (10a, b) IRA distributions
   - (11a, b) Pensions and annuities
   - (12) Unemployment compensation
   - (13a, b) Social security benefits
   - (14) Total income

6. Figure your adjusted gross income—lines 15a-16
   - (15a, b) IRA deductions
   - (15c) Total adjustments
   - (16) Adjusted gross income

7. Figure your standard deduction, exemption amount, and taxable income—lines 17-22
   - (17) Adjusted gross income
   - (18a) 65, older or blind
   - (18b) Dependents
   - (18c) Married filing separate return
   - (19-21) Standard deduction work area
   - (22) Taxable income

8. Figure your tax, credits, and payments—lines 23-28d (lines 1-9 EZ form)
   - (24a) Credit for child and dependent care expenses
   - (24b) Credit for the elderly or the disabled
   - (24c) Total credits
   - (25-26) Workspace
   - (27) Alternative minimum tax
   - (28a) Federal income tax withheld
   - (28b) 1993 estimated tax payments
   - (28c) Earned income credit
   - (28d) Total payments—excess social security and railroad retirement

9. Figure your refund or amount you owe—lines 29-33 (lines 10-11 EZ form)
   - (29) Amount overpaid
   - (30) Amount of refund desired
   - (31) Amount of refund applied to 1994 estimated tax
   - (32) Amount you owe
   - (33) Estimated tax penalty

10. Sign your income tax return

■ 1993 Form 1040A  page 2

| Name(s) shown on page 1 | | Your social security number |
|---|---|---|
| | | 989 : 00 : 3212 |

**Figure your standard deduction, exemption amount, and taxable income**

| 17 | Enter the amount from line 16. | 17 | 3,200 00 |
|---|---|---|---|

**18a** Check { ☐ **You** were 65 or older  ☐ Blind } **Enter number of**
if:  { ☐ **Spouse** was 65 or older ☐ Blind }  **boxes checked** ▶ 18a ☐

**b** If your parent (or someone else) can claim you as a dependent,
check here . . . . . . . . . . . . . . . . . . . ▶ 18b ☑

**c** If you are married filing separately and your spouse files Form
1040 and itemizes deductions, see page 36 and check here ▶ 18c ☐

**19** Enter the **standard deduction** shown below for your filing status. **But if you checked any box on line 18a or b,** go to page 36 to find your standard deduction. **If you checked box 18c,** enter -0-.

- Single—$3,700     ● Head of household—$5,450
- Married filing jointly or Qualifying widow(er)—$6,200
- Married filing separately—$3,100

| | | 19 | 3,200 00 |
|---|---|---|---|
| 20 | Subtract line 19 from line 17. If line 19 is more than line 17, enter -0-. | 20 | -0- |
| 21 | Multiply $2,350 by the total number of exemptions claimed on line 6e. | 21 | -0- |
| 22 | Subtract line 21 from line 20. If line 21 is more than line 20, enter -0-. This is your **taxable income.** ▶ | 22 | -0- |

**Figure your tax, credits, and payments**

If you want the IRS to figure your tax, see the instructions for line 22 on page 37.

| 23 | Find the tax on the amount on line 22. Check if from: ☑ Tax Table (pages 50–55) or  ☐ Form 8615 (see page 38). | 23 | -0- |
|---|---|---|---|
| 24a | Credit for child and dependent care expenses. Complete and attach Schedule 2.  24a | | |
| b | Credit for the elderly or the disabled. Complete and attach Schedule 3.  24b | | |
| c | Add lines 24a and 24b. These are your **total credits.** | 24c | |
| 25 | Subtract line 24c from line 23. If line 24c is more than line 23, enter -0-. | 25 | -0- |
| 26 | Advance earned income credit payments from Form W-2. | 26 | |
| 27 | Add lines 25 and 26. This is your **total tax.** ▶ | 27 | -0- |
| 28a | Total Federal income tax withheld. If any tax is from Form(s) 1099, check here. ▶ ☐  28a  145 00 | | |
| b | 1993 estimated tax payments and amount applied from 1992 return.  28b | | |
| c | **Earned income credit.** Complete and attach Schedule EIC.  28c | | |
| d | Add lines 28a, 28b, and 28c. These are your **total payments.** ▶ | 28d | 145 00 |

**Figure your refund or amount you owe**

| 29 | If line 28d is more than line 27, subtract line 27 from line 28d. This is the amount you **overpaid.** | 29 | 145 00 |
|---|---|---|---|
| 30 | Amount of line 29 you want **refunded to you.** | 30 | 145 00 |
| 31 | Amount of line 29 you want **applied to your 1994 estimated tax.**  31 | | |
| 32 | If line 27 is more than line 28d, subtract line 28d from line 27. This is the **amount you owe.** For details on how to pay, including what to write on your payment, see page 42. | 32 | |
| 33 | Estimated tax penalty (see page 43). Also, include on line 32.  33 | | |

**Sign your return**

Keep a copy of this return for your records.

Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and accurately list all amounts and sources of income I received during the tax year. Declaration of preparer (other than the taxpayer) is based on all information of which the preparer has any knowledge.

| ▶ Your signature | Date | Your occupation |
|---|---|---|
| ▶ Spouse's signature. If joint return, BOTH must sign. | Date | Spouse's occupation |

**Paid preparer's use only**

| Preparer's signature ▶ | Date | Check if self-employed ☐ | Preparer's social security no. |
|---|---|---|---|
| Firm's name (or yours if self-employed) and address ▶ | | E.I. No. | |
| | | ZIP code | |

☆ U.S. GOVERNMENT PRINTING OFFICE: 1993—345—221     **1993 Form 1040A page 2**

## Paying Your Taxes



One of Stefan's students is working through her income tax return. She has reached the final step of comparing the tax liability, or the taxes owed, to the tax credit, or the amount she has paid. Will she receive a refund or will she have to pay a balance due? What is the amount of the balance due or the refund?

1. Does she have a balance due or a refund due?

_____

2. What is the amount of balance due or refund due?

_____



*Time for some practice!*

**7.01**
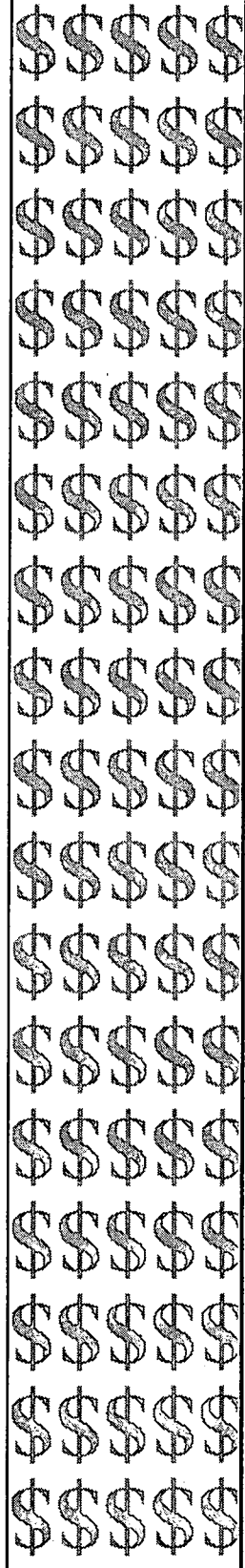
# Income Tax Form 1040A

*Follow the directions in each problem below. Your teacher will provide the forms required.*

1. Complete Form 1040A for Susan M. Thomas. She is 17 years old, single, and has good eyesight. She is claimed as a dependent on her mother's return. She wants to contribute $3 to the Presidential Election Campaign Fund. She earned $2900 as reported on her Form W-2. She also received $475 of interest income from National Bank. She had $137 of federal income tax and $221.85 of Social Security tax withheld from her wages. She lives at 903 West Lane, Jackson, VA 22102. Her Social Security number is 912-00-0001.

2. Complete Form 1040A for James C. Door. He is 18 years old, single, and claimed as a dependent on his father's tax return. He wants to contribute $3 to the Presidential Election Campaign Fund. James earned $2800 in wages. He had $220 of federal income tax and $214.20 of Social Security tax withheld from his wages. He received $442 of interest income from First Commercial Bank. He lives at 120 East Lane, Jefferson, OH 45207. His Social Security number is 987-00-0012.

7.01

# Income Tax Form 1040EZ

*Follow the directions in each problem below. Your teacher will provide the forms required.*

1. Complete Form 1040EZ for Jerry M. Michaels. He is 17 years old, single, and claimed as a dependent on his father's return. He wants to contribute $3 to the Presidential Election Campaign Fund. He received a Form W-2 showing $1800 in wages for the year and $137.70 in Social Security tax and Medicare withheld; his federal income withholding was $0, because he had signed *exempt* on his Form W-4. He also received $40 of interest income. His address is 1701 Adams Street, Chicago, IL 60602. His Social Security number is 981-00-0023.

2. Complete Form 1040EZ for Jane Winchester using the information from page 169. She is 20 years old, single, and cannot be claimed as a dependent on anyone else's return. She does not want to contribute to the Presidential Election Campaign Fund.

**Go Figure...**

# Taking Care of the Little Things

## Child-Care Credit

Chris, one of the students that Stefan was tutoring, was married and had two children—a four-year-old and a two-year-old. Because his wife worked, they had to take both children to a preschool. While the cost of childcare seemed expensive, they could not afford for his wife not to work. Chris asked Stefan to explain the deductions that they could claim for childcare.

Stefan explained to Chris that while it was not exactly a deduction, there was the *Child and Dependent Care Credit*. Stefan told Chris that this credit is available to those parents who pay someone to care for their children who are *under the age of 13*, or a spouse or dependent who could not care for himself or herself. For Chris and his wife to take the credit, they had use the childcare so they could look for a job, or work and get income from a job.

In order to figure his credit amount, Chris would have to use *Schedule 2—Child and Dependent Care Expenses for Form 1040A Filers*. Stefan told him that he would need to fill in Parts I and II of Schedule 2 and attach it to his **income tax return**. Chris would use Part II to figure the amount of credit that he could take.

Stefan continued to explain that Chris could include the cost of the care provided outside his home for his children. Chris's children were both enrolled in a preschool, so Stefan asked if that care center met all of the applicable state and local regulations. A *care center* is defined as a place that provides care for more than six persons (other than persons who live there) and receives a fee, payment, or grant for providing services, even if the center is not run for profit.

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# Paying Your Taxes

There were a few things that Chris needed to know *not* to do.

- **Do not** include the amounts paid for food and schooling. If they are part of the total care and cannot be separated from the total cost, then include the total cost.

- **Do not** include child support payments.

- **Do not** include the cost of schooling for a child in the first grade or above.

- **Do not** include the expenses for sending your child to an overnight camp.

**You Try!**

Refer to the *Schedule 2* form on p. 183 to answer the following questions. Use the **Go Figure...** area for any calculations.

**Go Figure...**

Chris has two small daughters—Lauren who is two and Leiza who is four. They both attend Little Folks Preschool. It costs Chris and his wife $425.00 per month for the girls to attend. The $425.00 includes registration, materials, meals, and care for both girls.

1. On which line would Chris write the name of his children's preschool?

   _____

2. What is the number of *qualifying persons* that he would enter on line 3?

   _____

3. What is the maximum amount of *qualified expenses* that Chris can enter on line 4?

   _____

4. If Chris enters $22,150.19 on line 8 of the *Schedule 2* form, what would be the decimal amount that he would enter on line 9 on the form?

   _____

5. If Chris enters the maximum allowed on line 4, $7000 on line 5, and $15,150.19 on line 6, what would be his entry for line 10?

   _____

# Paying Your Taxes

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| Schedule 2 | Department of the Treasury—Internal Revenue Service | | |
|---|---|---|---|
| (Form 1040A) | **Child and Dependent Care** | | |
| | **Expenses for Form 1040A Filers** (H) **1993** | | OMB No. 1545-0085 |

| Name(s) shown on Form 1040A | Your social security number |
|---|---|
| | |

You need to understand the following terms to complete this schedule: **Dependent care benefits, Earned Income, Qualified expenses,** and **Qualifying person(s).** See **Important terms** on page 58. Also, if you had a child born in 1993 and line 17 of Form 1040A is less than $23,050, see **A change to note** on page 59.

| **Part I** | 1 | (a) Care provider's name | (b) Address (number, street, apt. no., city, state, and ZIP code) | (c) Identifying number (SSN or EIN) | (d) Amount paid (see page 61) |
|---|---|---|---|---|---|
| **Persons or organizations who provided the care** | | Little Folks Preschool | .......................... | | |
| | | | .......................... | | |

You MUST complete this part.

(If you need more space, use the bottom of page 2.)

2  Add the amounts in column (d) of line 1.      **2**

3  Enter the number of **qualifying persons** cared for in 1993  . . . ▶  |2|

| Did you receive dependent care benefits? | ── NO ──▶ Complete only Part II below. |
|---|---|
| | ── YES ──▶ Complete Part III on the back now. |

---

**Part II**

**Credit for child and dependent care expenses**

4  Enter the amount of **qualified expenses** you incurred and paid in 1993. DO NOT enter more than $2,400 for one qualifying person or $4,800 for two or more persons. If you completed Part III, enter the amount from line 25.      **4**    4,800|00

5  Enter YOUR **earned income.**      **5**    7,000|00

6  If married filing a joint return, enter YOUR SPOUSE'S earned income (if student or disabled, see page 61); **all others,** enter the amount from line 5.      **6**    15,150|19

7  Enter the smallest of line 4, 5, or 6.      **7**    4,800|00

8  Enter the amount from Form 1040A, line 17.      **8**   22,150|19

9  Enter on line 9 the decimal amount shown below that applies to the amount on line 8.

| If line 8 is— | | Decimal amount is | If line 8 is— | | Decimal amount is |
|---|---|---|---|---|---|
| Over | But not over | | Over | But not over | |
| $0—10,000 | | .30 | $20,000—22,000 | | .24 |
| 10,000—12,000 | | .29 | 22,000—24,000 | | .23 |
| 12,000—14,000 | | .28 | 24,000—26,000 | | .22 |
| 14,000—16,000 | | .27 | 26,000—28,000 | | .21 |
| 16,000—18,000 | | .26 | 28,000—No limit | | .20 |
| 18,000—20,000 | | .25 | | | |

     **9**   4,800 × .23

10  Multiply **line 7** by the decimal amount on line 9. Enter the result. Then, see page 61 for the amount of credit to enter on Form 1040A, line 24a.      **10** = 1,104|00

**Caution:** If you paid $50 or more in a calendar quarter to a person who worked in your home, you must file an employment tax return. Get **Form 942** for details.

For Paperwork Reduction Act Notice, see Form 1040A Instructions.     Cat. No. 107491     1993 Schedule 2 (Form 1040A) page 1

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## Itemized Deductions

Chris was very happy to know that he qualified for the child-care credit, but he was sure that he would have to use a different income tax return for the next year. A lot had happened in his small family this year. Aside from having to pay for a big move in order to go to school, his youngest child had been very ill at the beginning of last year. She had severe asthmatic bronchitis attacks, and had to be hospitalized several times—once in intensive care. Because Chris and his wife had taken a minimal health plan to save money on their health insurance, they had to pay for quite a bit of the hospitalization fees. He felt sure that he would be able to deduct some of these things from his income tax.

Stefan explained that Chris was absolutely right. He would have to use an income tax form other than than the Form 1040A. If Chris was only going to take the *Earned Income Credit*—credit for those with an **adjusted gross income** of less than $23,050 and who had a child living with them—and the *Child-Care Credit*, then he could continue using the same form. But since Chris and his wife would be *itemizing* **deductions**, then they would need to use Form 1040. Itemized deductions can include the amounts paid for state and local income taxes, real estate taxes, mortgage interest, medical expenses, and gifts to non-profit organizations. These costs can be deducted from a taxpayer's taxable income. *Taxable income* is any income on which the earner must pay taxes.

Stefan showed Chris the section in the Instruction Booklet for 1040A which said, *if married and filing jointly, and both spouses are under age 65 having deductions greater than $6200, then you might benefit from itemizing.* Chris knew right away that their hospitalization costs and the cost of their move had exceeded $6200, and that itemizing their deductions would be the best thing to do. Stefan told Chris that along with the

**Go Figure...**

1040 Form, he would have to use *Schedules A & B*—*A* for itemized deductions on one side, and *B* for interest and dividend income on the other side.

**You Try!**

Refer to the *Schedule A* on p. 187 and previous information to answer the questions below. Use the **Go Figure...** area for any calculations.

**Chris decided that he would tackle the itemized deductions on Schedule A by himself. It took him a while to read over the form and figure out where everything was to go. After he finished he realized that Schedule A was clearly marked and fairly easy to use with Form 1040.**

1. What was the total of Chris's medical and dental

   expenses? _____

   On which line of the Schedule A form should he enter

   those expenses?_____

2. What is the amount to be entered on line 2?_____

3. What is 7.5% of line 2? _____

   On which line should it be entered? _____

**Go Figure...**

Is the amount on that line greater than or less than line

1? _____
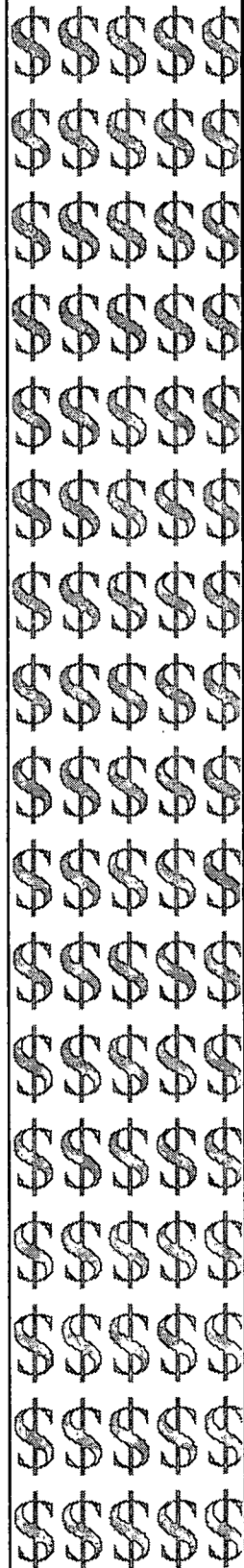
What does that result mean for Chris? _____

_____

4. What was the total of Chris's moving expenses?

_____

On which line should he enter that amount? _____

*Time for some practice!*

# Paying Your Taxes

(Form 1040)

Department of the Treasury
Internal Revenue Service (O)

## Schedule A—Itemized Deductions
(Schedule B is on back)

▶ Attach to Form 1040. ▶ See Instructions for Schedules A and B (Form 1040).

OMB No. 1545-0074

**19 93**

Attachment
Sequence No. 07

Name(s) shown on Form 1040

Your social security number

| | | | | |
|---|---|---|---|---|
| **Medical and Dental Expenses** | | Caution: Do not include expenses reimbursed or paid by others. | | |
| | 1 | Medical and dental expenses (see page A-1) | 1 **4,600 00** | |
| | 2 | Enter amount from Form 1040, line 32. 2 **32,000 00** | | |
| | 3 | Multiply line 2 above by 7.5% (.075) | 3 **2,400 00** | |
| | 4 | Subtract line 3 from line 1. If zero or less, enter -0- ▶ | 4 | **2,200 00** |
| **Taxes You Paid** (See page A-1.) | 5 | State and local income taxes | 5 | |
| | 6 | Real estate taxes (see page A-2) | 6 | |
| | 7 | Other taxes. List—include personal property taxes ▶ | 7 | |
| | 8 | Add lines 5 through 7 ▶ | 8 | |
| **Interest You Paid** (See page A-2.) | 9a | Home mortgage interest and points reported to you on Form 1098 | 9a | |
| | b | Home mortgage interest not reported to you on Form 1098. If paid to the person from whom you bought the home, see page A-3 and show that person's name, identifying no., and address ▶ | | |
| **Note:** Personal interest is not deductible. | | | 9b | |
| | 10 | Points not reported to you on Form 1098. See page A-3 for special rules | 10 | |
| | 11 | Investment interest. If required, attach Form 4952. (See page A-3.) | 11 | |
| | 12 | Add lines 9a through 11 ▶ | 12 | |
| **Gifts to Charity** (See page A-3.) | | Caution: If you made a charitable contribution and received a benefit in return, see page A-3. | | |
| | 13 | Contributions by cash or check | 13 | |
| | 14 | Other than by cash or check. If over $500, you MUST attach Form 8283 | 14 | |
| | 15 | Carryover from prior year | 15 | |
| | 16 | Add lines 13 through 15 ▶ | 16 | |
| **Casualty and Theft Losses** | 17 | Casualty or theft loss(es). Attach Form 4684. (See page A-4.) ▶ | 17 | |
| **Moving Expenses** | 18 | Moving expenses. Attach Form 3903 or 3903-F. (See page A-4.) ▶ | 18 | **3,000 00** |
| **Job Expenses and Most Other Miscellaneous Deductions** (See page A-5 for expenses to deduct here.) | 19 | Unreimbursed employee expenses—job travel, union dues, job education, etc. If required, you MUST attach Form 2106. (See page A-4.) ▶ | 19 | |
| | 20 | Other expenses—investment, tax preparation, safe deposit box, etc. List type and amount ▶ | 20 | |
| | 21 | Add lines 19 and 20 | 21 | |
| | 22 | Enter amount from Form 1040, line 32. 22 | | |
| | 23 | Multiply line 22 above by 2% (.02) | 23 | |
| | 24 | Subtract line 23 from line 21. If zero or less, enter -0- ▶ | 24 | |
| **Other Miscellaneous Deductions** | 25 | Other—from list on page A-5. List type and amount ▶ | | |
| | | | 25 | |
| **Total Itemized Deductions** | 26 | Is the amount on Form 1040, line 32, more than $108,450 (more than $54,225 if married filing separately)? • NO. Your deduction is not limited. Add lines 4, 8, 12, 16, 17, 18, 24, and 25 and enter the total here. Also enter on Form 1040, line 34, the larger of this amount or your standard deduction. • YES. Your deduction may be limited. See page A-5 for the amount to enter. | ▶ 26 | |

For Paperwork Reduction Act Notice, see Form 1040 Instructions.     Cat. No. 11330X          Schedule A (Form 1040) 1993

**7.03**

# Schedule A

*Use a Schedule A form (p. 187) and the situations described below to answer the questions that follow.*

Shawn and Jennifer Jones had medical and dental expenses of $2865. Their adjusted gross income (line 32 Form 1040) is $33,550. They had moving expenses of $2540.

1.  What was the total of the Jones' medical and dental expenses? _____

    On which line of the Schedule A form should they enter those expenses?

    _____

2.  What is the amount to be entered on line 2? _____

3.  What is 7.5% of line 2? _____

    On which line should it be entered? _____

    Is the amount on that line *greater than* or *less than* line 1? _____

    What does that result mean for Shawn and Jennifer? _____

    _____

4.  What was the total of the Jones' moving expenses? _____

    On which line should they enter that amount? _____

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## Paying Your Taxes

$

Dennis and Michelle Allen had medical expenses of $2395 and dental expenses of $950. Their adjusted gross income (line 32 Form 1040) is $34,200. Their moving expenses were $2835.

5. What was the total of the Allen's medical and dental expenses? _____

   On which line of the Schedule A form should they enter those expenses?

   _____

6. What is the amount to be entered on line 2? _____

7. What is 7.5% of line 2? _____

   On which line should it be entered? _____

   Is the amount on that line *greater than* or *less than* line 1? _____

   What does that result mean for Dennis and Michelle? _____

   _____

8. What was the total of the Allen's moving expenses? _____

   On which line should they enter that amount? _____

# Choosing a Place to Live

# Vocabulary

*Study the terms and definitions below.*

## Finding and Renting an Apartment

abbreviation ......................... a letter or group of letters that stands for a longer word or phrase

deposit ................................. money a renter prepays for any damages to property; money is refunded when the renter moves out if property has not been damaged

lease ..................................... a written agreement between a renter and the owner of the place being rented

refund................................... money returned to payee from a payment such as a deposit

rent ...................................... payment for the use of something owned by someone else

rental application ................. an information form filled out by someone who wants to rent property

## Buying a Home

closing costs ......................... fees paid at the time that documents are signed when purchasing a house

down payment .................... a portion of the purchase price of a house that is paid when the mortgage loan is signed

interest ................................ the amount a lender charges a borrower on borrowed money

mortgage loan ...................... a loan to finance the purchase of a house which also permits the lender to claim the property if the loan payments are not made

## Tax-Advantage of Owning a House

assessed value ...................... the value of property for tax purposes; found by multiplying the property value by the rate of assessment

mill ........................................ a unit often used to express real estate tax rates; $1.00 is the equivalent of 1000 mills

rate of assessment ............... the percent used to calculate the assessed value of a house

real estate taxes ................... fees collected from the owners of property by the local government; used to operate and maintain roads, parks, schools, government offices, and other public property and services

tax rate ................................ the mill charge for property, used to determine real estate taxes

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# Choosing a Place to Live

## Homeowner's Insurance

escrow account ..................... an account often required by the lender of a mortgage loan to guarantee payment of the homeowner's real estate taxes and fire insurance premium

fire protection class ............. a number assigned to a house by an insurance company according to the quality of fire protection available in the area

homeowner's insurance ...... insurance to protect the homeowner and his home from losses due to fire, theft, and personal liability

loss-of-use coverage ............ insurance coverage to pay for some of the expenses of living away from home while damage to the owner's home is being repaired

premium ............................. the amount paid for insurance coverage

replacement value ............... the amount of money required to reconstruct a house if destroyed; amount depends on type of insurance policy issued

## Utilities

utilities cost ......................... charges for public services, such as electricity, natural gas, telephone, and water

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**Go Figure...**

## Repairs and Maintenance

area ................................................. measurement of a given surface expressed in square units

domestic services ................. services such as lawn care and cleaning that are purchased for a fee

perimeter ............................. the distance around a figure

square foot .......................... a unit of measurement one foot by one foot; abbreviated—ft²; sq. ft.

square yard .......................... a unit of measurement one yard by one yard; abbreviated—yd²; sq. yd.
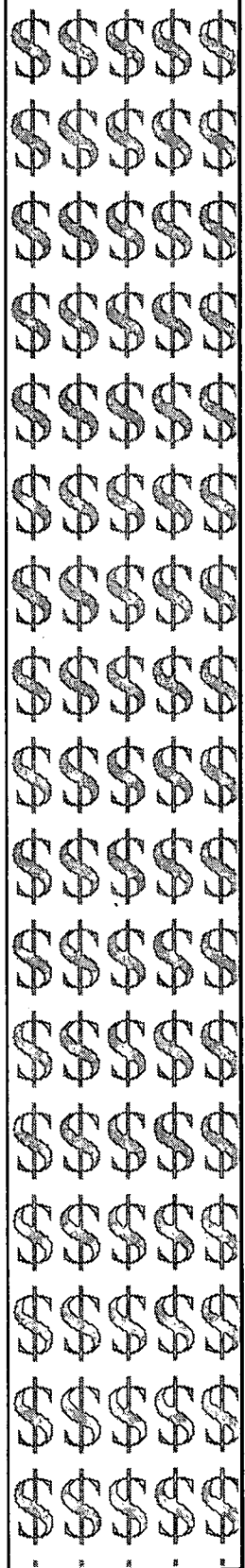
# Renting a Place to Live

## Finding and Renting an Apartment

Since Gërta already had experience when it came to apartment hunting, she told her friend Sheila that she would help her find an apartment to **rent**. Gërta knew that the best ways to start looking for an apartment were to

- tell friends and acquaintances about the kind of place you're looking for,

- drive around the neighborhood where you plan to live, and call to find out about any place that has a *For Rent* sign on it, and

- look in the local newspaper's classified *ads* for rooms or apartments for rent.

Gërta and Sheila looked through the newspaper for apartments to rent. Sheila did not understand the language in the *ads*.

| **House-hunting in the Classified Ads** | | | |
|---|---|---|---|
| Abbreviation | Meaning | Abbreviation | Meaning |
| 1st: | first month's rent | msg.: | message (call and leave a message) |
| AEK: | all electric kitchen | | |
| apt.: | apartment | mo.: | month |
| avail.: | available | nr.: | near |
| BA: | bathroom | op.: | operated |
| BR: | bedroom | pvt.: | private |
| dep.: | deposit | req'd.: | required |
| excl.: | excellent | sec.: | security |
| FP: | fireplace | sm.: | small |
| Incl.: | includes | w/: | with |
| lg.: | large | | |

For example, she did not know that the word *ads* is an **abbreviation**, or a short form, of the word *advertisement*. There were so many abbreviations in the advertisements that Sheila felt that she needed a dictionary of abbreviations to interpret the ads. Gërta developed a chart to help Sheila.

## You Try!
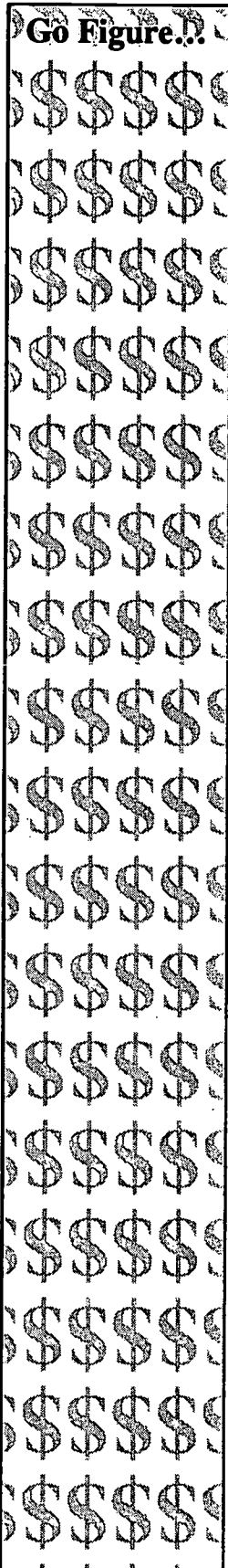
Read the rental ads below. Use the chart on the previous page to read the abbreviations. Then rewrite the ads without abbreviations on the lines below.

Sm. studio in excel. location. Coin op. laundry on property. $500 mo. incl. all util. Avail. 7/23/94. 1st, sec. & cleaning dep. req'd. Call 555-2458.

1. _____

   _____

   _____

   _____

Cute cabin w/view, pvt. sundeck, nr. town. Woodstove. Avail. now. $475. 555-5878.

2. _____

   _____

   _____

Sm. 2 BR apt. w/lg. sundeck close to trans. $580 1st, lst. sec. dep. $300. 555-5555 msg.

3. _____

   _____

   _____

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# Choosing a Place to Live

Sm. apt., 2 BR, 1 BA, FP. No pets or
smoking. $450 mo. 555-5346, 555-
4366 msg.

4. _____

_____

_____

_____

While looking through the ads, Gërta and Sheila noticed that
some apartments were furnished and others had only a stove and
a refrigerator. Because ads may not tell about stoves and
refrigerators, they would ask about these things when they
called in response to the ads.

Once Gërta and Sheila found an apartment for a price that
Sheila could afford, they went to talk to the owner. The owner
gave Sheila a **rental application**. A rental application is an
information form that is filled out by someone who wants to
rent property. The information that the owner needed to have on
the application included

- Sheila's name,
- where Sheila presently lives,
- the address and phone number of the
  place where Sheila works; how long
  she's worked there; and Sheila's salary,
- the name of anyone else who will be
  living in the apartment,
- her roommate's income and place of
  employment, if any, and
- the name, address, and phone number of
  someone who knows her and can verify
  that she is reliable. Sheila should select
  someone to whom she has made

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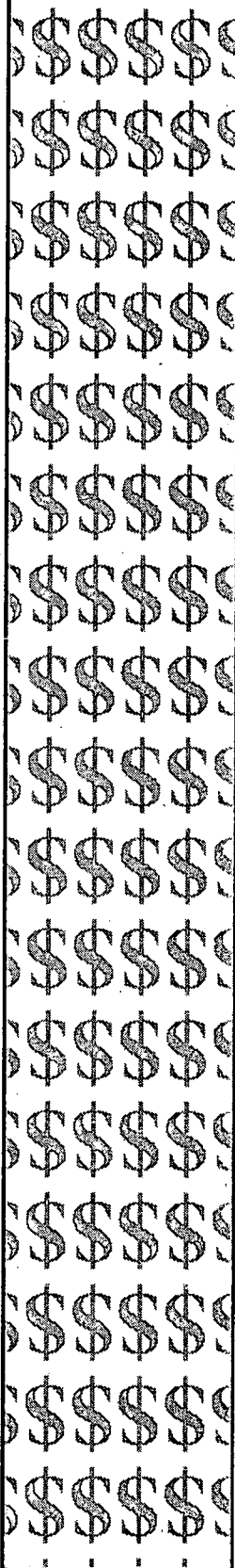
payments on a regular basis. (If Sheila was presently renting an apartment, she could use her landlord, or owner of that place.)

After her rental application was approved, Gërta helped Sheila to move into her new apartment. Sheila gave the owner a money order for the first month's rent, security and cleaning deposit, and key deposit. A *deposit* is the money that a renter has to pay before moving in. The money will be returned to the renter when the renter has moved out if the place is clean and has not been damaged, and the key has been returned. This return of money is called a *refund*. If, however, the apartment is damaged, dirty, or a key is lost, part or all of the deposit will not be refunded.

**You Try!**
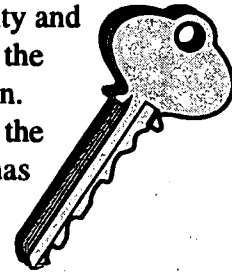
Use the previous information to answer the questions below. Use the **Go Figure...** area for any calculations.

**Sheila's rental application was approved and she moved in. She gave the apartment owner a money order for $875. Of that, $475 was for her first month's rent, and the balance of $400 was for her deposits.**

1. How much would Sheila save each month if she had a roommate with whom she could split the rent?

# Choosing a Place to Live

2. If Sheila's rent is increased by $40 per month, what would her rent be?

_____

3. After living in the apartment for one year, Shelia is moving. Everything is clean, but the wall needs repair because she hung something heavy on it. The owner says it will cost $65 to have the wall patched and painted. The owner subtracted that cost from Sheila's deposit. How much money was refunded?

_____

4. When Shelia went to collect her refund and turn in her keys, she discovered that she'd lost the second key to the storage room. The owner subtracted an additional $3 from Sheila's deposit. How much of Sheila's security deposit was returned?

_____

5. Sheila paid her rent of $475 by the 1st of every month. She lived in the apartment from January 1st to June 1st. How much total rent did she pay?

_____

**Go Figure...**
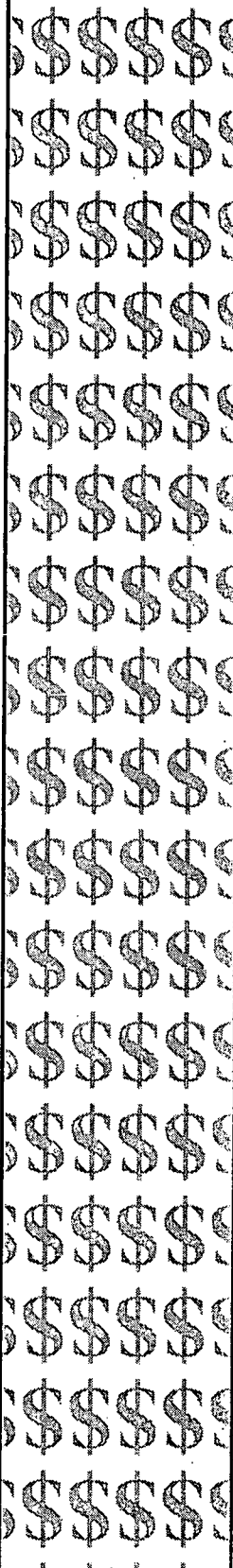
At the time that Sheila paid her first month's rent and security deposit, she had to sign a **lease**. A *lease* is a legal contract that covers all of the conditions of agreement between the renter and management, such as

- how much rent is paid,
- when the rent payment is due,
- what is included in the rent,
- other charges and deposits,
- the minimum length of time renter and owner agree to rent apartment (length of lease),
- penalty renter will pay if renter moves out before the lease ends (breaks lease), and
- how long in advance the renter must notify owner before moving.

Gërta had told Sheila to read every part of the lease before signing it—to make sure that she agreed with everything in the lease. Gërta explained to her that not all leases were the same. With some leases, the renter would lose just the last month's rent and security deposit if they moved out before the lease ended. With others, the renter may have to pay rent for as long as the contract states.

Sheila's first experience in renting an apartment went well. She had learned to read advertisements, make deposits, fill out applications, and read and understand lease agreements.

*Time for some practice!*

282

9.01  $

# Buy or Rent?

*Solve the problems below. Use a separate sheet of paper for computation and write the correct answer on the line provided.* Remember: *You should spend no more than 25% of your monthly salary for rent.*

1. As an LPN, Lucy earns $2240 per month. What is the most she should pay for one month's rent?

   _____

2. Paulo works 40 hours per week and earns $6.85 per hour. He earns $1096 per month. What is the most he can spend for rent?

   _____

3. Gabriel and Jovan are going to rent an apartment together. Jovan's monthly income is $625. Gabriel's is $710. How much can they afford together?

   _____

4. Cindy wants to rent a house with two other people. The house rents for $960 a month. How much will each person have to pay for rent?

   _____

5. The rent on an apartment is $650. At the end of the year, the rent will be increased by 15%. How much will the rent be in January?

   _____

283

**Go Figure.**
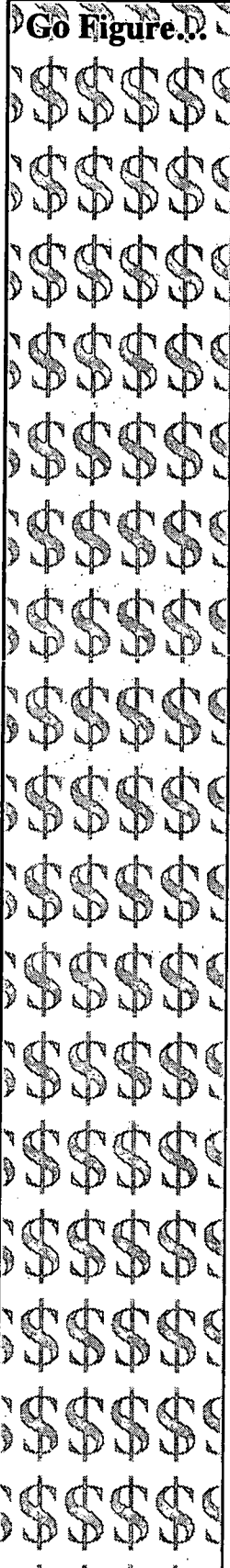
# To Buy or to Rent?

## Buying a Home

Angela had saved money for many years so she could buy a home. She knew that the rent she was paying was not really an investment for her. Except for having had a place to live, she would have nothing to show for the years of rent she had paid. She would also feel better operating under her own rules rather than those in an apartment lease.

Before she decided to buy a house, she weighed the "pros" and the "con" of owning a home.

| Owning vs Renting | | | |
|---|---|---|---|
| Owning a Home | | Renting a Place | |
| Pros | Cons | Pros | Cons |
| • Can use a part of some home expenses to reduce income taxes paid <br><br> • Can deduct the amount of interest paid on home mortgage and property taxes from income <br><br> • Deductions may make homeowning less expensive than renting <br><br> • No lease agreements <br><br> • Personal satisfaction of ownership | • Homeowning has many expenses <br><br> • Cost of property taxes <br><br> • Cost of repairs and maintenance <br><br> • Must pay for home owner's insurance <br><br> • Must pay interest on mortgage <br><br> • Loss of the use of the money invested on the home | • No homeowning expenses <br><br> • No property taxes <br><br> • Owners responsible for repairs and maintenance <br><br> • Can use money that would be used for down payment in buying a house | • Not an investment <br><br> • Must follow lease agreement or pay penalty <br><br> • Limited in design changes that can be made to rental property |

Angela's research told her that between 20% and 25% of families in our country own their own homes—single-family houses, mobile homes, or condominiums.

# Choosing a Place to Live
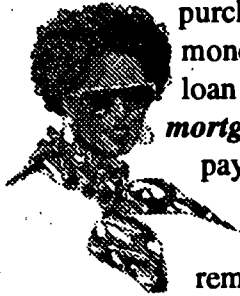
Angela was aware that the cost of houses was so great that most people could not afford to pay the full price at the time of purchase. Similarly, she would have to borrow money from a bank, credit union, or savings and loan association. This borrowed money is called a *mortgage loan*, and is paid back in equal monthly payments. Lenders require a certain percent of the price of the house to be paid in cash. That amount is called a *down payment*, and the remainder of the cost is borrowed or financed.

Angela made an appointment to see one of the bank officers at her bank. She felt comfortable asking the officer's advice. Angela had quite a few questions.

- How much money is needed to make a down payment on a house?

- Are there fees or costs to pay besides the down payment? If so, what are those costs?

- Are there any hidden costs in borrowing money?

- Are all mortgage terms the same? If not, how do they differ?

The bank officer was willing to answer Angela's questions. He first explained to her that she would need a certain amount of cash available to make a *down payment*. He told her that the down payment on the purchase of a house was generally 10%–30% of the sale price of the house.

The loan officer told her that there were no *hidden* costs, but that she did need to be prepared for quite a few added expenses and fees. These expenses would include legal fees, insurance, credit checks, title searches, prepaid interest, property taxes, termite inspections, land surveys, and preparation of documents. These expenses are called *closing costs*—fees which *must* be paid at the time of purchase. Closing costs often make up 1%–3% of the purchase price of the home. Some

**Go Figure...**

banks charge a flat fee regardless of the amount of the loan.
Some charge a percentage of the amount of the loan, and others
charge itemized fees.

Another cost that Angela would have to pay, the
officer told her, is the *interest*, or the amount of
money charged for borrowing money. The
mortgage loan is repaid along with the interest
in monthly payments.

**You Try!**

Refer to the information above to answer the questions below.
Use the **Go Figure...** area for any calculations.

**Angela had been looking at different
homes. She was considering purchasing
one selling for $62,500. The bank
required 15% down payment. What
amount would she finance?**

MORTGAGE LOAN AMOUNT = SELLING PRICE − DOWN PAYMENT

MORTGAGE LOAN AMOUNT = $62,500 − (.15 x $62,500)

MORTGAGE LOAN AMOUNT = $62,500 − _____

MORTGAGE LOAN AMOUNT = $_____

**Angela got a mortgage loan at an annual
interest rate of 9% from Citizens State
Bank. The loan is for a period of 30
years with monthly payments of $427.66.
What will be the total amount of interest
charged?**

TOTAL INTEREST CHARGED = TOTAL AMOUNT PAID − MORTGAGE AMOUNT

TOTAL INTEREST CHARGED = (MONTHLY PAYMENT × NO. OF MONTHS) − MORTGAGE AMOUNT

TOTAL INTEREST CHARGED = (MO. PAYMENT × [30 × 12]) − $53,125

TOTAL INTEREST CHARGED = ($427.66 × 360) − $53,125

TOTAL INTEREST CHARGED = $153,957.60 − $53,125

TOTAL INTEREST CHARGED = _____

**Citizens State Bank charges the fees listed below for a mortgage loan. How much will Angela have to pay in closing costs?**

**Citizens S**

**Bank Fees**

| | |
|---|---|
| Credit Report | $35.00 |
| Loan Origination Fee | 0.2% (of mortgage) |
| Abstract of Title | $60.00 |
| Attorney Fee | $100.00 |
| Documentation Stamp (of mortgage) | 0.3% |
| Processing Fee (of mortgage) | 0.1% |

**Go Figure...**

CLOSING COSTS = CREDIT REPORT + LOAN FEE + ABSTRACT
FEE + ATTORNEY FEE + STAMP FEE + PROCESSING FEE

CLOSING COSTS = _____ + _____ + _____

+ _____ + _____ + _____

CLOSING COSTS = _____

*Time for some practice!*

**9.02**

# Cost of Buying a Home

*Use the chart below to solve the following problems. Use a separate sheet of paper for computation, and write the correct answer on each line.*

| | | | | |
|---|---|---|---|---|
| **Mortgage Table—Principal Sum $1000** | | | | |
| | | **Years** | | |
| **%** | **15** | **20** | **25** | **30** |
| 8.5 | 9.85 | 8.68 | 8.06 | 7.69 |
| 9.0 | 10.15 | 9.00 | 8.40 | 8.05 |
| 9.5 | 10.45 | 9.33 | 8.74 | 8.41 |
| 10.0 | 10.75 | 9.66 | 9.09 | 8.78 |
| 10.5 | 11.06 | 9.99 | 9.45 | 9.15 |

1. Edward and Marta Rivera want to buy a house. Edward earns $6.50 working 40 hours a week. Marta earns $1150 per month. How much should they consider borrowing to pay for the house? (*Remember:* You should borrow no more than two times your annual gross income.)

   _____

2. What is the total amount of interest that will be paid on a home loan of $45,000 for 30 years if the monthly payment is $463.05?

   _____

3. Robert and Kim borrowed $66,500 to buy a home. If their bank offered a 10.5% interest rate on a 30-year mortgage, how much would their monthly payments be?

   _____

9.02

4.  What is the monthly payment on a loan of $46,500 for 25 years if the annual interest is 8.5%?

    _____

5.  Compare the total interest on a home loan for $80,000 at 9.0% for 15 years with the same home at 10% for 30 years. What is the total interest charged on each?

    15 years _____

    30 years _____

290

# Paying Real Estate Taxes

## The Tax-Cost of Owning a Home

Just when Angela was ready to be a *happy homeowner*, she learned that paying **real estate taxes** or *property taxes,* was a major expense that accompanied homeownership. Real estate taxes are fees collected from property owners by the local governmen. These taxes are used to pay for roads, parks, schools, government offices, and other public property and services. To understand these taxes, Angela made a trip to her local tax office.
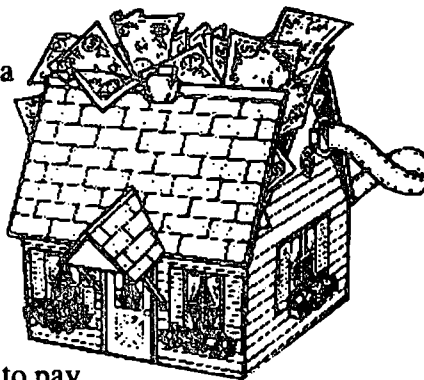
At the tax office, Angela learned that the real estate tax is an annual tax based on the value of the property. The tax officer explained to Angela that the property value of her house ($65,000) was determined by an assessor hired by her local government.

The local government taxes the property at a certain percentage of its **assessed value**. This percentage is called the *rate of assessment.* The *assessed value* is figured by multiplying the *property value* by the *rate of assessment.* Cook County, where Angela lives, uses 85% as the rate of assessment.

ASSESSED VALUE = PROPERTY VALUE X RATE OF ASSESSMENT

ASSESSED VALUE = $65,000 x .85

ASSESSED VALUE = _____

Angela figured the assessed value of her property to be $55,250. But how much would her property taxes be? The amount of property tax that Angela will have to pay will be

**Go Figure...**

based on the **tax rate**, or percentage charged by the local government. The *tax rate* is often expressed in terms of **mills**. A mill is $.001 or 1000 mills equal to $1. The tax officer told Angela that the local tax rate was 22 mills, or $0.022, per $1000 of assessed value.

| 1 Mill = One-Thousandth of a Dollar = $.001 |
|---|

TAX RATE = NUMBER OF MILLS ÷ 1000

TAX RATE = 22 ÷ 1000

TAX RATE = .022 OR 2.2% OF ASSESSED VALUE

**You Try!**

Refer to the information above to answer the question below. Use the **Go Figure...** area for any calculations.

**The Cook County tax assessor placed the value of Angela's property at $65,000. The rate of assessment in Cook County is 85% of property value. The tax rate is 22 mills. What is the tax on Angela's property?**

REAL ESTATE TAX = ASSESSED VALUE × TAX RATE

REAL ESTATE TAX = $55,250 × .022

REAL ESTATE TAX = _____

*Time for some practice!*

9.03

# Taxes on a Home

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

**REAL ESTATE TAX = ASSESSED VALUE X TAX RATE**

1. The Lees' property has an assessment value of $78,500. The tax rate is 2.5% of assessed value. What is the Lees' annual property tax?

   _____

2. Jeff's house is assessed for tax purposes at $60,000. The tax rate is 3%. What is Jeff's annual property tax?

   _____

3. The market value of Jan's house is $85,000. For tax assessment value is 60% of the market value. The tax rate is 2.2% of the assessment. How much property tax will Jan have to pay this year?

   _____

4. The value of the Goldberg's home is $100,000. The rate of assessment is 80% of property value. The tax rate is 22 mills. What is the tax on their property?

   _____

**Go Figure...**

# Insured and Assured

## Homeowner's Insurance

Angela was anxious to protect her new home. She knew that one of the ways to protect her home, property, and valuables was to purchase **homeowner's insurance.** *Homeowner's insurance* is insurance to protect the homeowner and the home from losses due to fire, theft, or personal liability. It is often required by the mortgage lender.

Homeowner's insurance includes other coverage such as

- **loss-of-use coverage**—coverage that pays for some of the expenses of living away from home while damage to the home is being repaired, and

- **personal liability and medical coverage**—coverage that protects homeowner from financial losses if someone is injured on the homeowner's property.

The insurance company charges an annual **premium** to insure the house and its contents. The amount is based on several things including the type of materials used to build the house, its location, and the amount of insurance.

Much of the cost for homeowner's insurance is for losses caused by fire. The determine the premium for each house, insurance companies assign a number according to the quality of fire protection that is available in the area. This number is called the *fire protection class*.
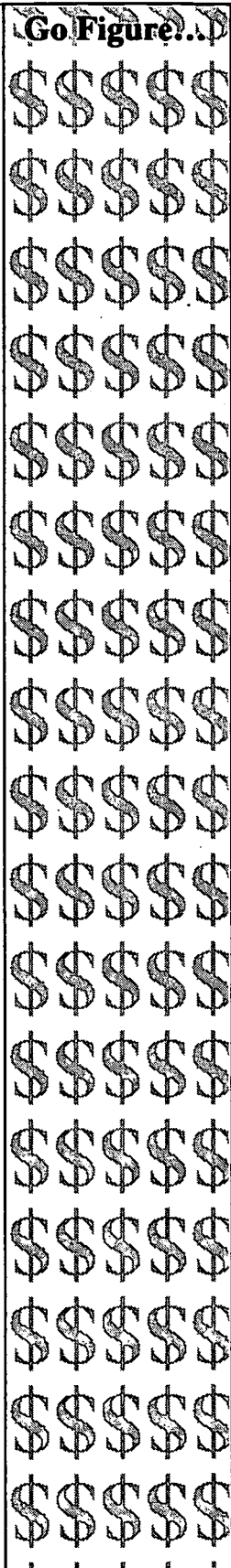
| Annual Premiums for a Typical Homeowner's Policy | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amount of Insurance Coverage | Brick/Masonry Veneer | | | | Wood Frame | | | |
| | Fire Protection Class | | | | Fire Protection Class | | | |
| | 1—6 | 7—8 | 9 | 10 | 1—6 | 7—8 | 9 | 10 |
| $ 10,000 | $ 84 | $ 91 | $ 108 | $ 113 | $ 91 | $ 95 | $ 113 | $ 119 |
| 15,000 | 89 | 95 | 114 | 119 | 95 | 100 | 119 | 126 |
| 20,000 | 93 | 100 | 120 | 126 | 100 | 105 | 126 | 133 |
| 25,000 | 98 | 105 | 126 | 132 | 105 | 110 | 132 | 139 |
| 30,000 | 107 | 115 | 138 | 144 | 115 | 121 | 144 | 152 |
| 35,000 | 117 | 126 | 151 | 158 | 126 | 132 | 158 | 167 |
| 40,000 | 127 | 136 | 164 | 171 | 136 | 143 | 171 | 181 |
| 50,000 | 146 | 157 | 188 | 197 | 157 | 165 | 197 | 209 |
| 60,000 | 169 | 182 | 219 | 229 | 182 | 191 | 229 | 242 |
| 70,000 | 193 | 208 | 250 | 262 | 208 | 218 | 262 | 277 |
| 80,000 | 222 | 239 | 288 | 301 | 239 | 251 | 301 | 319 |
| 90,000 | 250 | 270 | 325 | 341 | 270 | 283 | 341 | 361 |
| 100,000 | 280 | 302 | 361 | 381 | 302 | 317 | 381 | 404 |
| 150,000 | 425 | 459 | 554 | 581 | 459 | 482 | 581 | 615 |

Angela's agent explained to her that for just a little more money, she could buy extended coverage—insurance that covers losses from wind, smoke, hail, riots, explosions, falling planes, and cars and trucks. Angela wasn't planning on any of these problems, but she knew that she could never predict the future. She decided to purchase the extended coverage for her peace of mind.

Angela's insurance agent also explained that if she wanted to receive full payment of any loss up to the amount of the policy, she would have to insure her new home for at least 80% of its **replacement value**. The *replacement value* is the amount it would cost to reconstruct a home if it were destroyed. Some companies require 90% to 100% of the home's replacement value.

**You Try!**

Refer to the information and Annual Premiums chart given above to answer the questions below. Use the **Go Figure...** area for any calculations.
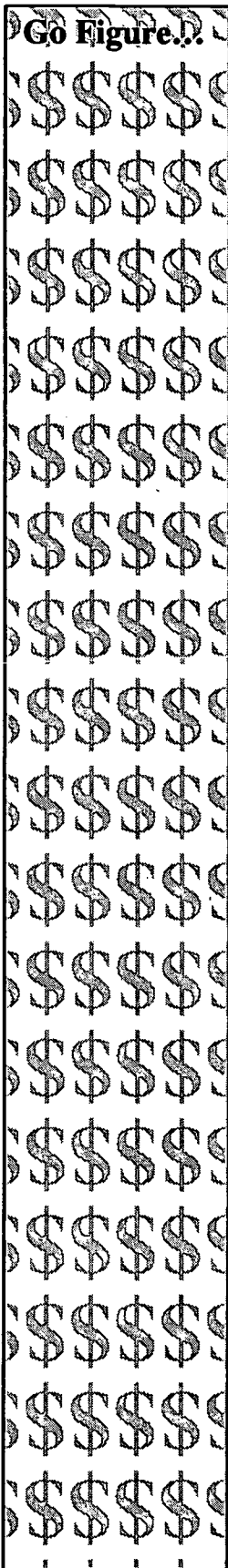
Go Figure...

The replacement value of Angela's new home would be $65,000. Angela wants to insure her home for 80% of its replacement value. What would be the amount of coverage on Angela's home?

AMOUNT OF COVERAGE = PERCENT x REPLACEMENT VALUE

AMOUNT OF COVERAGE = .80 x 65,000

AMOUNT OF COVERAGE = _____

If the replacement value of Angela's home is $65,000, and she insures it for 80% of the replacement value, what would be her annual premium if her new home has a wood frame and is rated in fire protection class 4? Use the chart on the previous page, and round the coverage to the nearest $10,000.

AMOUNT OF COVERAGE = _____

ANNUAL PREMIUM = _____

Just when Angela was beginning to worry about *how* and *when* she was going to remember to pay these premiums, the insurance agent told her that she shouldn't worry—her total monthly payment on her home mortgage would include the amount of her real estate taxes and homeowner's insurance premium. This special account is called an *escrow account*. When it came time to pay her taxes, the bank will take the money out of the escrow account and make the payment.

# Choosing a Place to Live

## You Try!

Refer to the information above and the Housing Expenses
listed below to answer the following question. Use the **Go
Figure...** area for any calculations.

*Housing Expenses for June*

| | |
|---|---|
| Mortgage payment | $427.66 |
| Insurance ($157÷12) | 13.08 |
| Property taxes ($1215+12) | $101.29 |
| Electricity | 45.90 |
| Heating fuel | 56.20 |
| Telephone | 26.18 |
| Water | 16.20 |
| Wallpaper labor | 30.00 |
| Repair storm door | 18.64 |

**Angela's monthly mortgage payment is
$427.66. She must also pay $\frac{1}{12}$ of her
annual homeowner's insurance
premium of $157 and her property
taxes. What is Angela's monthly escrow
amount, and what is her total monthly
payment?**

MONTHLY ESCROW AMOUNT = (ANNUAL TAXES + ANNUAL
INSURANCE PREMIUM) ÷ 12

MONTHLY ESCROW AMOUNT = ($1215.50 + 157) ÷ 12

MONTHLY ESCROW AMOUNT = $1372.50 ÷ 12

MONTHLY ESCROW AMOUNT = _____

**Go Figure...**
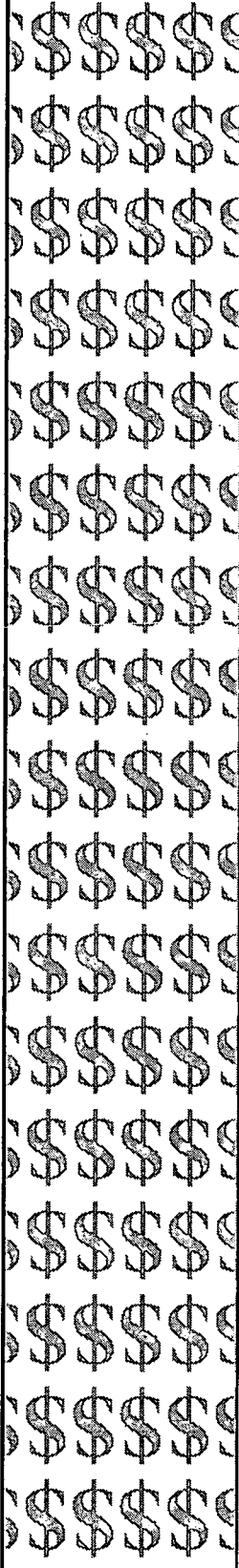
MONTHLY PAYMENT = MONTHLY MORTGAGE PAYMENT + MONTHLY ESCROW AMOUNT

MONTHLY PAYMENT = $427.66 + $114.38

MONTHLY PAYMENT = _____

## Monthly Utilities

Angela knew that in addition to her monthly mortgage payment, real estate taxes, and insurance payment, she would have other expenses, including utilities, maintenance, and home improvements. Her **utilities cost** would include charges for electricity, gas, water, and telephone. During the application process for her mortgage, Angela's bank officer had told her that the Federal Housing Administration (FHA) recommended that her monthly housing cost be less than 25% of her monthly net pay.

**You Try!**

Refer to the Housing Expenses on the previous page to answer the question below. Use the **Go Figure...** area for any calculations.

**Angela has a monthly take-home pay of $2972. Her monthly expenses for the month of June are listed above. Were her housing costs for June within the FHA guidelines?**

## Choosing a Place to Live

RECOMMENDED MAXIMUM = 25% x TAKE-HOME PAY

RECOMMENDED MAXIMUM = .25 x $2972

RECOMMENDED MAXIMUM = _____


TOTAL MONTHLY COSTS < OR > OR = RECOMMENDED MAXIMUM

TOTAL MONTHLY COSTS < OR > OR = $743.00

_____ < OR > OR = $743.00


**Were Angela's housing costs within the guidelines?**

_____


*Time for some practice!*
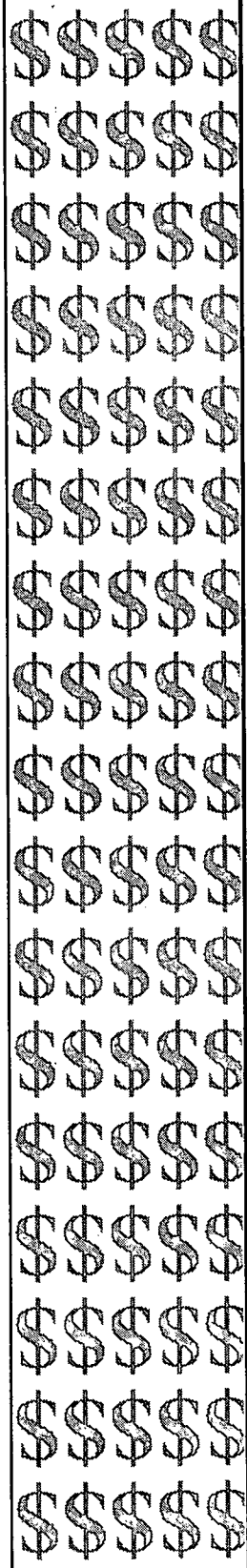
9.04-9.05

# Home Insurance

*Refer to the chart on page 215 and solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line. Round the coverage to the nearest $10,000.*

1. The Baldwins' brick home has a $60,000 homeowner's policy. The home is in fire protection class 9. What is the annual premium?

   _____

2. The Smiths own a brick home that has a replacement value of $87,500. They purchased a homeowner's policy for 80% of its replacement value. The Smiths live in an area that has been rated in fire protection class 3. What is their annual policy premium?

   _____

3. Marcy's parent's home is wooden and has a replacement value of $70,000. With a fire protection class of 10, what is their monthly premium?

   _____

4. Mitch had average monthly housing expenses of $692 with $1857 net monthly income. Is he within the FHA recommended guidelines? If not, how much would he have to reduce his housing costs?

   _____

   _____

5. Shelby's monthly mortgage payment is $750, including property taxes. She must also pay ¹⁄₁₂ of her homeowner's insurance premium of $280. What is her total monthly payment?

   _____

300

# Keep Up with Upkeep

## Estimating Home Repair and Maintenance Costs
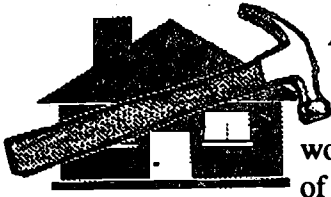
After moving into her new home, Angela wanted to make some repairs and improvements. She knew that she would have to hire someone to do some of the domestic services—such as lawn care, window cleaning, and rug shampooing.

To save money, she decided to do some of the other work herself. She could teach herself to do such things as wallpapering and painting. On other improvements, such as installing vinyl flooring, insulation, and a fence she decided that she could save money by purchasing all of the materials herself and then hiring someone to do the actual labor.

Angela needed to learn to estimate the amount and cost of materials needed for each job. In a book on do-it-yourself home repairs, she learned that estimating the amount of material for each job required an understanding of mathematics—*perimeter*, *area*, *square feet*, and *square yards*, in particular.

Angela learned that *perimeter* is the distance *around* a figure. She noticed that the word "rim" was in *perimeter*. She thought that would help her remember that perimeter is the measure of a *rim* of a figure. *Area* is the number of squares of a given size which covers a surface. *Square foot* and *square yard* are units of measurement that are equal to a square that measures either one foot or one yard on each side. Angela thought she had it now. She could figure the amount of paint, wallpaper, floor covering, carpeting, and fencing to buy for her house.

**Go Figure...**

**You Try!**
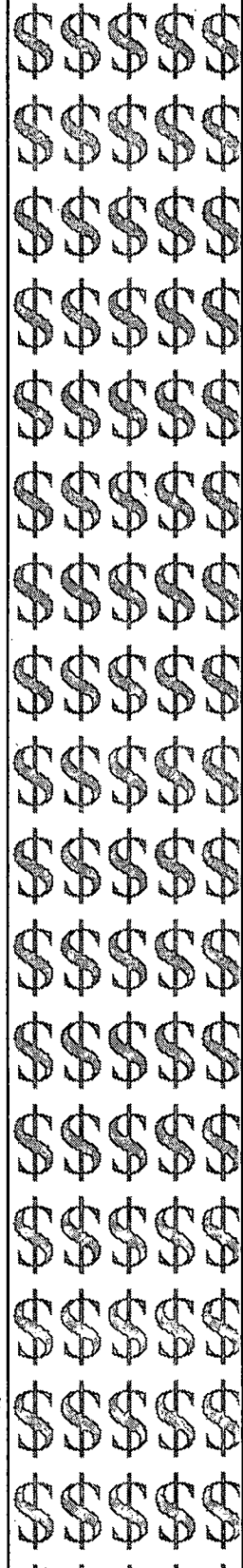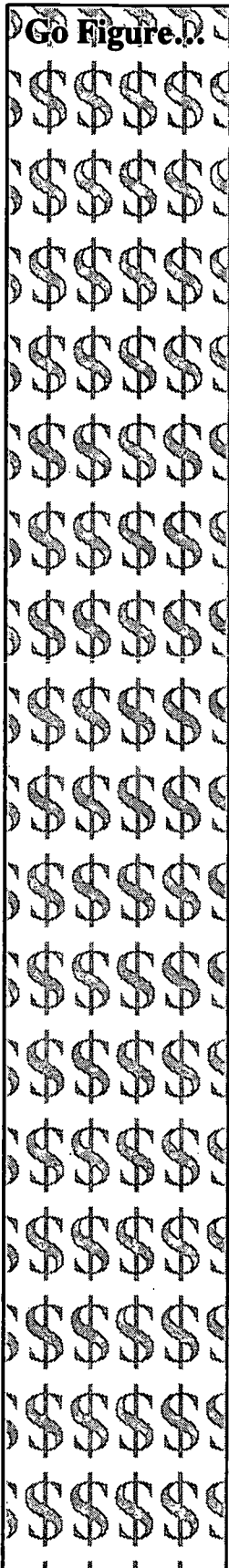
Refer to the perimeter and area diagrams below to answer the following questions. Use the **Go Figure...** area for any calculations.

**Perimeter**

8 ft

5 ft

P = 2 ( l + w )

**Area**

8 ft

5 ft

A = l x w
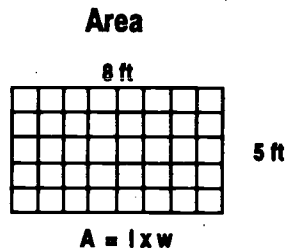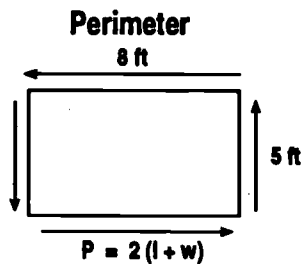
**Angela started with the paint for her living room. Her living room is 12' x 16' with 8' ceilings. The paint that she chose will cover 400 square feet per gallon. How many gallons will she need? How many gallons should she buy to paint the walls?**

AMOUNT OF PAINT = TOTAL AREA OF THE WALLS ÷ COVERAGE PER GALLON

AREA = LENGTH (L) X WIDTH (W)
AREA = (L x W) + (L x W) + (L x W) + (L x W)
AREA = (8 x 16) + (8 x 16) + (8 x 12) + (8 x 12)
AREA = 128 + 128 + 96 + 96
AREA = _____ SQ. FT.

AMOUNT OF PAINT NEEDED = 448 ÷ 400

AMOUNT OF PAINT NEEDED = _____ (GALLONS)

AMOUNT OF PAINT TO PURCHASE = _____ GALLONS
(A FRACTION OF A GAL. MUST BE ROUNDED UP.)

## Choosing a Place to Live

Angela also likes the idea of having a privacy fence around her property for both privacy and protection. Angela's lot is rectangular. It is 90 feet long and 60 feet wide. How many feet of fencing will she need to enclose her property?

PERIMETER = 2 x (LENGTH + WIDTH)

PERIMETER = 2 x (90 + 60)

PERIMETER = 2 x 150

PERIMETER = _____

AMOUNT OF FENCING = _____ LINEAR FT.

Angela is going to wallpaper her bedroom. It measures 10' x 12' with 8' ceilings. A single roll of wallpaper covers 72 square feet. The pattern she wants is sold only by the double roll. How many double rolls of wallpaper should she buy?

WALL AREA = PERIMETER OF ROOM x HEIGHT OF ROOM

WALL AREA = 2 x (12 + 10) x HEIGHT OF ROOM

WALL AREA = 2 x 22 x 8

WALL AREA = 44 x 8

WALL AREA = _____ SQ. FT.

**Go Figure...**

SINGLE ROLLS = WALL AREA + 72 SQ. FT.

SINGLE ROLLS = 352 + 72

SINGLE ROLLS NEEDED = _____

SINGLE ROLLS TO BUY = _____ (ROUND UP)

DOUBLE ROLLS = SINGLE ROLLS + 2

DOUBLE ROLLS = _____ (ROUND UP)

**Angela wants to replace the dark vinyl floor in her kitchen with light-colored square tiles. Each tile square measures 12" x 12" and costs $1.39. How much will it cost to cover her 10' x 7' kitchen floor?**

COST = AREA OF FLOOR x COST PER TILE

COST = (10 x 7) x 1.39

COST = 70 x 1.39

COST = $ _____

*Time for some practice!*

9.06 $

# Home Repairs and Maintenance

*Solve the problems below. Use a separate sheet of paper for computation, and write the correct answer on each line.*

1. Find the cost of fencing your yard if 8 feet of fencing costs $9.82. The length of the yard is 45 feet and the width is 60 feet.

   _____

2. Find the cost of carpeting the floor of a room that is 8 feet by 10 feet, if the cost of carpeting is $2.06 per square foot.

   _____

3. A double roll of wallpaper covers 61 square feet. How many rolls will Paul and Jasmine need to wallpaper two walls in their hallway that are 15 feet and 11 feet long with an 8 foot ceiling?

   _____

4. What is the wall area of a room that is 14 feet by 10 feet with an 8 foot ceiling?

   _____

5. A can of paint covers 450 square feet and costs $12.88. How much did it cost to buy paint to apply two coats of paint to the four walls and ceiling of a room 15 feet by 12 feet by 10 feet high?

   _____
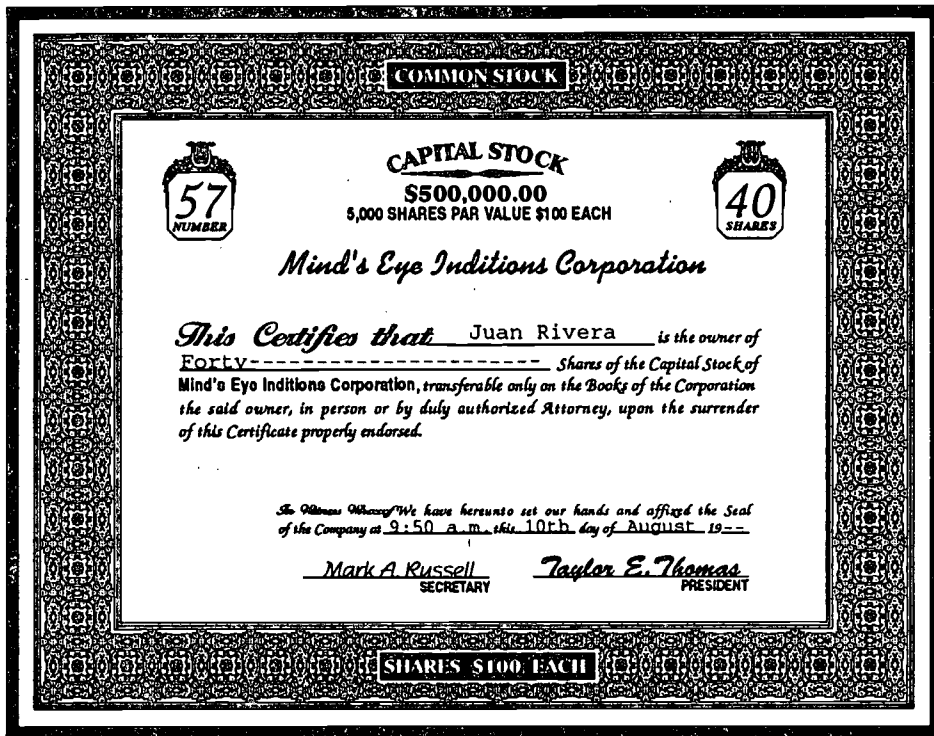
# Investing Your Money

# Vocabulary

*Study the terms and their definitions below.*

invest ..................................... to put money to use; to buy
something that could earn a profit

investment............................ an expenditure on something that
is expected to produce a profit;
sum spent

## Savings

certificate of deposit (CD) .. a special kind of savings account
that earns higher interest than a
regular account; the money must
be left on deposit for a specified
time or be penalized for early
withdrawal

interest penalty..................... charge you must pay if you
withdraw part or all of your
money from your certificate of
deposit or money market
certificate before the date of
maturity

maturity .............................. time when a certificate comes
due

money market certificate ... special certificates of deposit
with higher interest rates than
regular certificates of deposit; a
minimum deposit of $10,000 is
usually necessary

return ................................. the amount of money made as a
profit or paid as interest

229
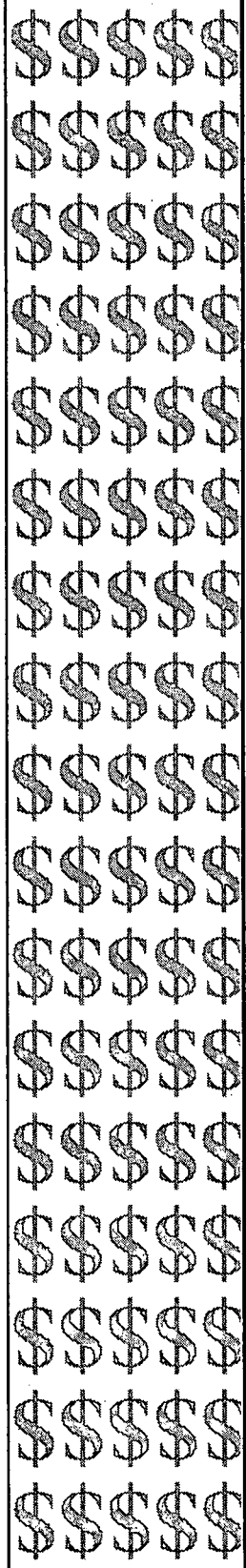
**Go Figure...**

## Bonds

annual yield ......................... the total interest or return for one year paid on money invested

auction price ....................... the face value of a U.S. government bond less the interest

bond..................................... long-term promissory note corporations use when borrowing money

discount .............................. description of a bond that is sold for less than its face value

dividends ........................... return on an investment in the stocks or bonds of a corporation

face value ........................... the dollar amount printed on an insurance policy or bond

loading charge .................... an amount of money that a stockbroker charges for handling a mutual fund purchase

loading rate........................ the percent of a mutual-fund investment that is paid to the stockbroker

market value....................... price at which a bond is sold

mutual fund ........................ investment company that sells shares and combines the investors' money in order to buy a large variety of stocks and bonds

# Investing Your Money

net asset value ..................... the worth of a share of mutual
fund; most investment companies
calculate the net asset value daily
by dividing the total market
value by the number of shares
outstanding

N.L. ...................................... "no load," or commission,
charged for buying shares

offer price ........................... the price for each share of a
mutual fund when *buying* shares

par value .............................. the face value of a bond; the
amount printed on the face of the
bond

premium .............................. description of a bond that is sold
for more than face value

quoted price ....................... the actual cost of bond, usually a
percent of the face value; also
called *quote*

redemption value ............... the value of a savings bond at the
time the owner redeems it; the
redemption value consists of the
cost of the bond plus interest

savings bonds ..................... a bond issued by the U.S.
government

stockbroker ........................ someone who buys and sells
stocks for other people; a dealer
in stocks and bonds

## Go Figure...

## Stocks

**loss** ........................................ the difference between the cost and selling price of an item when the cost is greater than the selling price

**net proceeds** ........................ the market price of shares of stock sold, less commission, transfer tax, and fees

**P.E. (price to earning) ratio** . an approximate ratio that compares the closing price of a share of stock to its annual earning

**profit** .................................... the amount you receive for selling something, minus the original cost and expenses

**shareholder** .......................... one who owns shares of corporation stock; a stockholder

**stock certificate** .................. a printed form that proves part ownership of a corporation

**stocks** .................................. shares of ownership in the corporation issuing the stock

# Investing Your Money

## Real Estate

**annual rental income** .......... rent received from tenants or those renting investment property

**annual net rental income** .... annual rent less expenses; amount left after all expenses of owning the property have been paid

**tenants** ................................. persons who pay money to use a house, apartment, or land belonging to someone else

# Which Money Makes the Most Money?

Juan Rivera had worked for quite sometime as a journeyman in carpentry. His skills had earned him several promotions. He was now in a management position—no longer making furniture. Juan's paycheck had also increased with his promotions. He had been able to pay off all of the loans and credit accounts that he had taken out when he first started working with this company. One day during a business luncheon, some of the other managers were discussing ways to **invest** their money. Juan listened carefully about the different types of **investments**, or expenditures of money for something that is expected to earn a profit. He understood, however, that an *investment* was not guaranteed to make money for the investor.

Over the years, Juan had saved money for both unexpected and planned expenses. He had opened a passbook savings account at his bank. Since he had no children, he did not have to worry about saving for the cost of their future right now. However, after listening to the other managers, he decided that it might be wise to start saving for his own future. He knew that one day he would want to retire. When he stopped working he would want to have enough money to support himself and, maybe, his family as well as enjoy his free time. Juan discovered that there were different ways for him to save his money and earn interest on his savings. The book that he was reading gave him a lot to think about.

# Investing Your Money
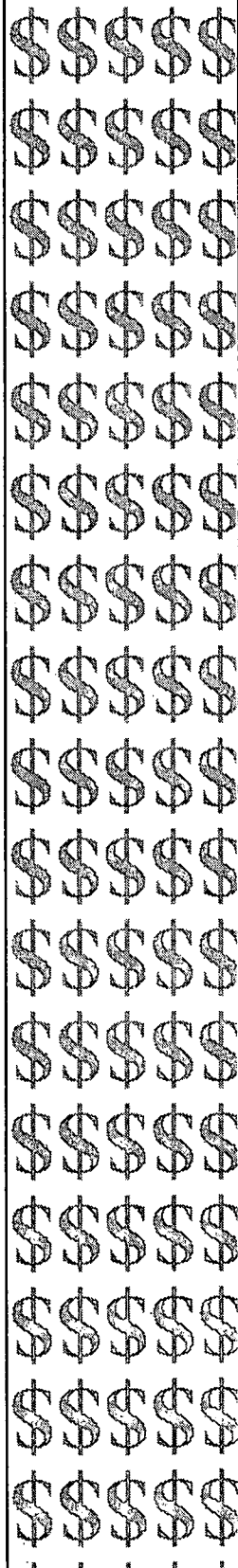
## Savings

### Passbook Savings Accounts

Passbook savings accounts are offered by
most banking institutions—commercial banks,
savings and loan associations (S&L), and
credit unions. Each institution has advantages
and disadvantages.
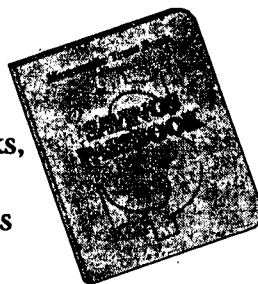
**Advantages.** Most people find that a passbook savings
accounts is very convenient. Customers can make deposits and
withdrawals in their bank accounts without giving advance
notice to the bank. There is also very little risk involved in
passbook savings account—the bank is insured and depositors
are not likely to lose money if the bank fails. Passbook savings
accounts are widely available and the interest rates paid on
deposits do not vary much from bank to bank.

**Disadvantages.** Because the passbook savings account is a
very safe investment, the **return** or the amount of money made
as a *profit* on the account is small compared with the returned
paid on other accounts. They also provide very little protection

### Money Rates*

| Rate | Description | Average Rate |
|------|-------------|--------------|
| **Prime Rate** | The basic interest rate that commercial banks charge their most valued customers. | May range from 8% to 21½%. |
| **Passbook Interest Rates** | The interest on passbook savings that is paid by the savings institutions at a fixed annual rate. | Annual fixed rate of 5.5%. (Commercial banks pay 5.25%.) |
| **Money Market Rates** | Interest rates which change weekly and are paid on money market accounts that have a minimum deposit of $2500. | May change as little as a *basis point* (one-hundredth of one percent [.01%]—100 basis pts.= 1%) |
| **Certificates of Deposit** | Interests rates paid on certificates of deposit or savings certificates, which vary according to the term of the the certificate. | May change as little as a *basis point* (one-hundredth of one percent [.01%]—100 basis pts.= 1%) |

*Rates are subject to change.

**Go Figure...**

against inflation, since consumer prices will increase much faster than the interest paid on savings.

**Certificates of Deposit**

Purchasing **certificates of deposit** (CDs) is another way to invest money. A *certificate of deposit* is a special kind of savings account that earns higher interest than a regular account. All banks use computers to calculate the interest earned. You may find printed tables of the interest earned on CDs are also available at banking institutions.
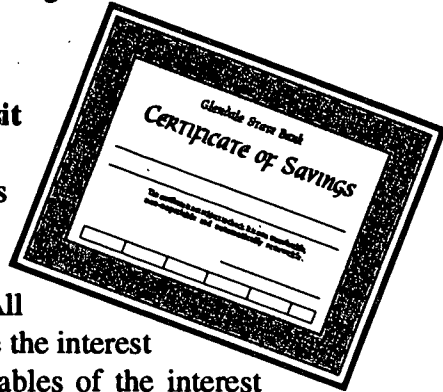
Certificates are bought for specific amounts such as $500 or $1000. The money invested in a CD must be left in deposit for a specified amount of time, or until it reaches **maturity**. The time of deposit may range from 90 days to 8 years. If the money is withdrawn early from the CD, the owner must pay an **interest penalty**, which is required by law. The *interest penalty* is a charge that must be paid if part or all of the money is withdrawn.

**You Try!**

Refer to the table below to answer the following question. Use the **Go Figure...** area for any calculations.

| Amount Per $1.00 Invested, Daily Compounding | | | | | | |
|---|---|---|---|---|---|---|
| Annual Rate | Interest Period | | | | | |
| | 3 Months | One Year | 2.2 Years | 4 Years | 6 Years | 8 Years |
| 5.75% | 1.014278 | 1.059180 | 1.154458 | 1.258577 | 1.411952 | 1.584017 |
| 6.0 | 1.014278 | 1.061831 | 1.161820 | 1.271224 | 1.433287 | 1.616011 |
| 6.25% | 1.015529 | 1.064489 | 1.169103 | 1.283998 | 1.454945 | 1.648651 |
| 6.50% | 1.016155 | 1.067153 | 1.176491 | 1.296900 | 1.476930 | 1.648651 |
| 6.75% | 1.016782 | 1.069824 | 1.183808 | 1.309932 | 1.499248 | 1.715821 |
| 7.00% | 1.017408 | 1.072501 | 1.191226 | 1.323094 | 1.521900 | 1.750579 |
| 7.25% | 1.018069 | 1.075185 | 1.198693 | 1.336389 | 1.544893 | 1.785936 |
| 7.50% | 1.018663 | 1.078543 | 1.206207 | 1.349817 | 1.568240 | 1.822006 |
| 7.75% | 1.019291 | 1.080573 | 1.213768 | 1.363380 | 1.591936 | 1.858806 |
| 8.00% | 1.019920 | 1.083278 | 1.221376 | 1.377079 | 1.615989 | 1.896348 |

# Investing Your Money

Juan decided to invest in CDs rather than continue to deposit his money in his passbook savings account. He wanted to earn the higher interest paid on CDs. He decided to purchase a $1000 CD. The CD was a 6-year certificate that earned 7.25% compounded daily. How much interest will he earn at the end of the 6 years?

TOTAL AMOUNT = ORIGINAL PRINCIPAL x AMOUNT PER $1.00

TOTAL AMOUNT = $1000 x _____

TOTAL AMOUNT = $_____

INTEREST EARNED = TOTAL AMOUNT – ORIGINAL PRINCIPAL

INTEREST EARNED = $_____ – $1000

INTEREST EARNED = $_____

## Money Market Certificates

Juan also learned about another type of certificate investment, called a *money market certificate*. A money market certificate is a special certificate of deposit with higher interest rates than a regular certificate of deposit. While that sounded great, Juan could not afford the initial investment—$10,000 or more! The certificate is issued for 26 weeks or 182 days. It may be renewed at the end of the 26-week period. However, the interest at the time of renewal may be higher or lower than the interest paid on the original certificate.

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**Go Figure...**

The money deposited in special accounts such as certificates of deposit, money market certificates, and others is almost always insured. These types of special accounts are also regulated by the federal or state governments. For example, one of the federal laws requires that the interest on money market certificates be simple rather than compound interest.

*Time for some practice!*

4.03

# Certificates of Deposit

*Refer to the chart on page 236 to solve the problems below. Write the correct answer on each line.*

TOTAL AMOUNT = ORIGINAL PRINCIPAL x AMOUNT PER $1.00

INTEREST EARNED = TOTAL AMOUNT − ORIGINAL PRINCIPAL

| | Original Principal | Interest Period | Total Amount | Interest Rate | Interest Earned |
|---|---|---|---|---|---|
| 1. | $500 | 1 yr. | _____ | 5.75% | _____ |
| 2. | $2000 | 3 mos. | _____ | 6.50% | _____ |
| 3. | $3200 | 4 yrs. | _____ | 7.00% | _____ |
| 4. | $1850 | 2.2 yrs. | _____ | 6.25% | _____ |
| 5. | $10,000 | 8 yrs. | _____ | 8.0% | _____ |

6. Helen purchased a 4-year certificate of deposit for $2000. The annual interest rate is 6.25%. What is the amount at maturity? What is the interest earned?

amount at maturity _____

interest earned _____

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4.03

7. Suzanne purchased a 8-year certificate of deposit for $3500. The annual interest rate is 8%. What is the amount of the certificate at maturity? What is the amount of interest earned?

        amount at maturity _____

        interest earned _____

8. Jana purchased a 3-month certificate of deposit for $500 that earns interest at a rate of 5.75% compounded daily. What is the amount of the certificate at maturity? What is the interest earned?

        amount at maturity _____

        interest earned _____

9. Abdul purchased an 6-year certificate of deposit for $8500. The interest rate is 7.5% compounded daily. What is the amount of the certificate at maturity? What is the interest earned?

        amount at maturity _____

        interest earned _____

10. Sophia invested $25,000 in a 26-week money market certificate. The interest rate on the day of purchase was 9.87%. Using a value of 1.041639, how much interest did Sophia's certificate earn during that period?

        interest earned _____

# Investing Your Money

$

11. Juan purchased a $20,000 26-week money market certificate. The interest rate on the day of purchase was 10.98%. Using a value of 1.108472, what is the maturity value of the certificate, if renewed for another 26 weeks? What is the interest on the certificate?

    maturity value _____

    interest earned _____

12. The Bradys have $7500 that they want to invest in a certificate of deposit. A 6-year certificate earns interest at a rate of 7.25%. An 8-year certificate earns interest at a rate of 7.75%. How much more interest can the Bradys earn if they purchase the 8-year certificate?

    _____

319
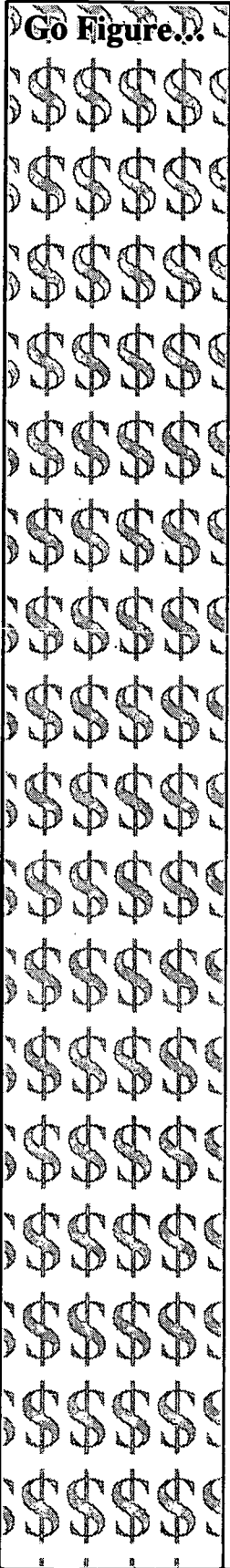
# Bonding For Profit

## Bonds

### United States Savings Bonds

Many people who want to invest their money purchase **savings bonds**. One type of savings bond, the *Series EE Savings Bond*, is a bond issued by the federal government. This bond can be purchased at banks, savings and loan associations, and other financial institutions. Sometimes it can be purchased through payroll deduction where the investor is employed.

The *Series EE Savings Bond* may have a **face value**—the dollar amount printed on the bond—that ranges from $50 to $50,000. The cost of a bond is half of its face value. The bond must be kept for at least six months before it can be cashed or redeemed. The **redemption value** of the bond is its original cost plus interest for the amount of time the bond is owned. The *redemption value* of any *Series EE* bond is based on the redemption value of a $50 bond. This value is listed in a table available from the financial institution.

| $50 Savings Bond Series EE (Cost: $25) | |
|---|---|
| After... | Redemption value is... |
| 6.0 months | $25.56 |
| 1.0 year | $26.52 |
| 1.5 years | $27.31 |
| 2.0 years | $28.13 |
| 2.5 years | $28.98 |
| 3.0 years | $29.85 |
| 3.5 years | $30.74 |
| 4.0 years | $31.66 |
| 4.5 years | $32.61 |
| 5.0 years | $37.90 |
| 5.5 years | $39.51 |
| 6.0 years | $41.19 |
| 6.5 years | $42.94 |
| 7.0 years | $44.77 |
| 7.5 years | $46.67 |
| 8.0 years | $50.55 |
| 8.5 years | $52.83 |
| 9.0 years | $55.21 |
| 9.5 years | $57.69 |
| 10.0 years | $60.29 |
| 15.0 years | $93.63 |
| 20.0 years | $145.40 |

Maturity: 8 years

**You Try!**

Refer to the information and the redemption value table above to answer the questions below. Use the **Go Figure...** area for any calculations.

Juan decided to invest in bonds. He bought a Series EE Savings Bond with a face value of $500 through payroll deduction at work. How much did Juan pay for the savings bond?

COST OF THE SERIES EE BOND = 50% X FACE VALUE

COST OF THE SERIES EE BOND = .50 x $_____

COST OF THE SERIES EE BOND = $_____

If Juan kept his savings bond for eight years, or till maturity, what would be the redemption value of his Series EE Savings Bond?

REDEMPTION VALUE = $_____

**Other Bonds**

Juan also discovered a different kind of *bond*. A **bond** was described as a long-term promissory note corporations or governments use when borrowing money. For instance, if the company that Juan works for wanted to borrow $50,000 for 10 years, then it could issue 100 ten-year bonds. Each bond would have a face value of $1000. The bonds would be the company's written promise to repay the money on the due date, and to pay interest on the loan. The interest is paid on the face value of the bond. The total amount of interest or return for one year is called the *annual yield*.
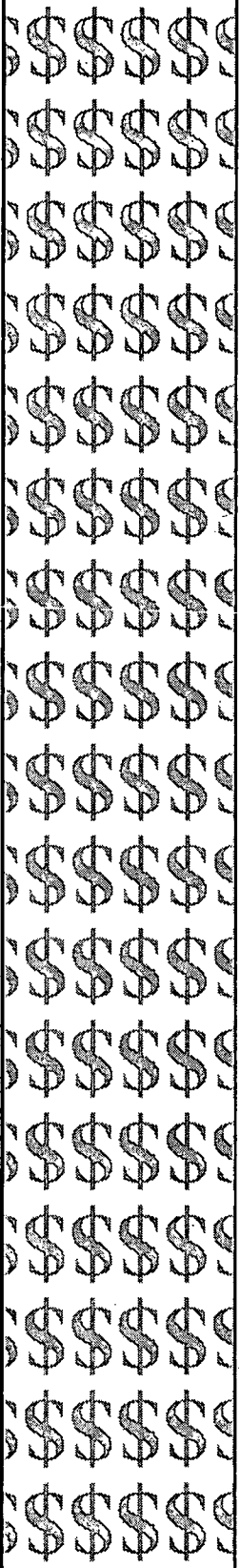
Anyone willing to lend money to the company could buy one or more of the bonds. Those persons would be called *bondholders* of the company. The company could use its property as security for the money that it borrows. If the company does not repay the loan, then the bondholders may take over the company's property. Different levels of government—federal, state, county, city, town, and school district—often borrow large amounts of money by selling or *issuing* bonds.

Corporation name usually abbreviated    Annual interest rate    Year of maturity    Net difference between the last price for this day and the last price of yesterday

## BOND QUOTATIONS

| Low | Close | Net Chg | Bonds | Cur. Yld. | Vol. | High | Low | Close | Net Chg | | Bonds | Cur. Yld. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

Number of bonds sold for the day    Highest and lowest price the bond sold for that day    Price of the last or closing sale of the day

Bonds usually have two kinds of value—**par value** and **market value**. *Par value* is the same as its *face value,* or the amount that is printed on the face of the bond. It is the amount that the borrower promises to pay to the bondholder on the due date. The *market value* of a bond is the price at which the bond is sold. The *par value* and the *market value* may not be the same. If a bond is selling for more than its face value or par value, then it is selling at a **premium**. For example, a bond with a par value of $1000 that sells for $1040 is selling at a *premium*. If the market value is less than the par value, then the bond is selling at a **discount.**

The United States government sells *Treasury bills* (T bills), *notes,* and *bonds* to borrow money. These bonds have another

# Investing Your Money

kind of value. The buyer or investor pays an **auction price**, or the face value minus the interest. Even though the investor pays a discounted amount for the treasury bills, he receives the face value of the treasury bill at maturity.

The market value or market price of a bond is usually given as a **quoted price** or as a percent of the par value. It is the actual cost of the bond. For instance, a price quotation of "94" means that the bond is selling for 94% of its par value. So the market price of the bond can be found by multiplying the par value by the percent.

| Maturity of Government Bonds | |
|---|---|
| Type of Bond | Time of Maturity |
| Treasury Bills | 3 months<br>6 months<br>1 year |
| Notes | 2 years to 10 years |
| Bonds | over 10 years |

## You Try!

Use the information given above to answer the questions below. Use the **Go Figure...** area for any calculations.

**Buying bonds sounded to Juan like a safe investment with a better return on his money. He called a local investment counselor to get a quote on a local government bond. The investment counselor gave him a quote of 95% on a municipal, or city, bond with a par value of $1000. What is the market price of this bond?**

**Go Figure...**

Go Figure...
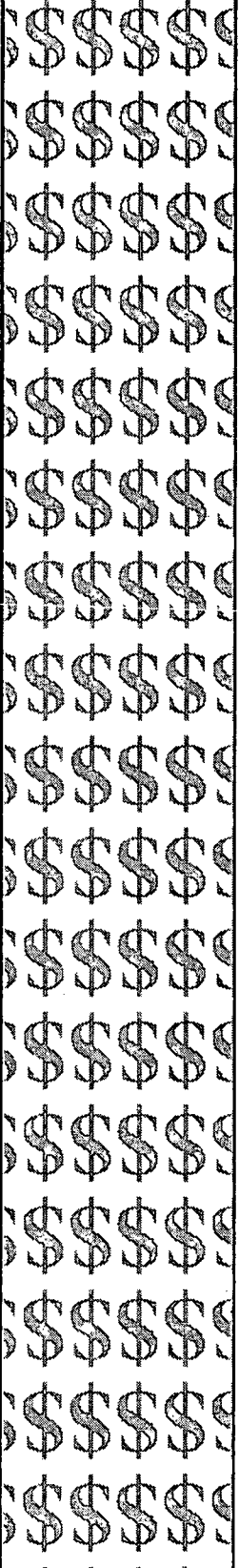
MARKET PRICE = QUOTED PRICE x PAR VALUE

MARKET PRICE = _____ x $1000

MARKET PRICE = $_____

**Is that municipal bond selling at a discount or at a premium?**

_____

**If Juan decided to purchase the $1000 municipal bond at the quoted price of 95%, and the bond paid interest at a rate of 6½%, what would be the annual interest? What is the annual yield (to the nearest hundreth of a percent)?**

ANNUAL INTEREST = INTEREST RATE x FACE VALUE

ANNUAL INTEREST = _____% x $1000

ANNUAL INTEREST = .065 x $1000

ANNUAL INTEREST = $_____

ANNUAL YIELD = ANNUAL INTEREST + BOND COST

ANNUAL YIELD = $_____ + $_____

ANNUAL YIELD = _____

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## Mutual Funds

Juan made a habit of studying the bond quotations in the newspaper to try to understand them better. He also continued his research on the different types of bonds. The more he read, the more types of bonds there seemed to be. Investing in mutual funds sounded like a less risky way to buy bonds with a potential for more profit. *Mutual funds* are investment companies. These companies combine the money from their investors to buy a large variety of *stocks* and *bonds* in large amounts. The money that the fund earns from its investment is paid to the *shareholders* as dividends. *Dividends* are the return on an investment in the *stocks* or *bonds* of a corporation.

As Juan studied the *mutual fund quotations* in the newspaper, he noticed that they were expressed as a net asset value (NAV) and an offer price. The *net asset value* is how much one share of a mutual fund is actually worth during the "selling" process. This value is usually calculated by dividing the total market value by the total number of existing shares. The *offer price* is the price that is paid for each share of a mutual fund during the "buying" process. Juan interpreted this to mean that if he was buying shares, he would pay the *offer price* of each share. He also understood that if he was selling shares, he would receive the *net asset value* of each share.

### MUTUAL FUNDS

| | NAV (Bid) | Offer Price (Buy) | Chg | | NAV (Bid) | Offer Price (Buy) | Chg |
|---|---|---|---|---|---|---|---|
| TrendAp | 11.23 | 11.92 | −.03 | TxUSAp | 11.54 | 12.12 | +.03 |
| ValueAp | 18.96 | 20.12 | +.02 | TxPaAp | 7.93 | 8.33 | +.02 |
| DelcpAp | 21.55 | 22.86 | +.05 | IntlVal | 9.73 | N.L. | −.02 |
| DeTRAp | 12.29 | 13.01 | +.05 | US8-10 | 10.71 | N.L. | +.01 |
| DelawAp | 17.22 | 18.27 | +.03 | Japan | 24.18 | N.L. | −.30 |
| DeichAp | 6.02 | 6.32 | −.01 | UKing | 22.63 | N.L. | −.10 |
| TreasAp | 9.00 | 9.28 | −.01 | Can | 14.23 | N.L. | −.08 |

Shares of a mutual fund have to be purchased through a stockbroker, or someone who buys and sells mutual funds or stocks for other people. The *stockbroker* is a dealer in stocks and bonds. He must be paid a *loading charge*—a charge or amount of money paid for handling a mutual fund purchase. It

**Go Figure...**
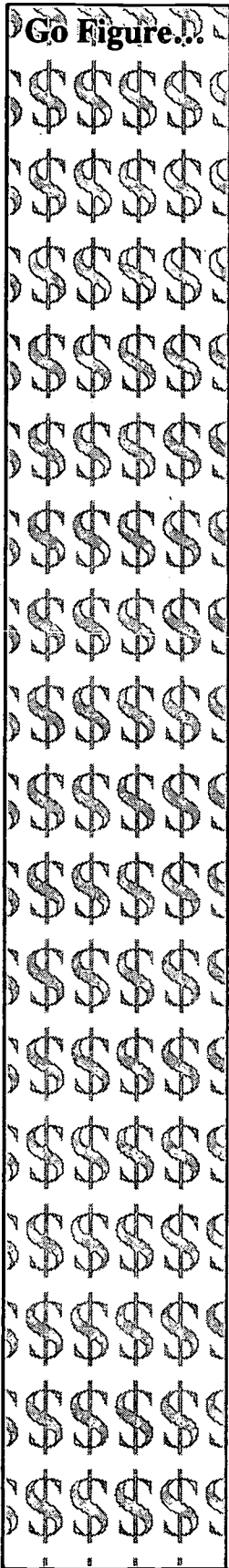
is usually zero to five and three-fourths percent of the amount that is invested. This percent is called the **loading rate**. The initials *N.L.* under the *offer price*, meant there is "no load" or commission, charged for buying that particular share. When there is no load, the *offer price* will be the same as the *net asset value*.

**You Try!**

Refer to the newspaper clipping of mutual funds above to answer the questions below. Use the **Go Figure...** area for any calculations.

**Juan considered buying two mutual funds—the *TrendAp* and the *ValueAp*. How much would he pay for 50 shares of each fund?**

TOTAL MARKET PRICE = OFFER PRICE x NUMBER OF SHARES

*TRENDAP*:   TOTAL MARKET PRICE = $_____ x 50

TOTAL MARKET PRICE = $_____

*VALUEAP*:   TOTAL MARKET PRICE = $_____ x 50

TOTAL MARKET PRICE = $_____

**How much would Juan receive if he sold 25 shares of the *ValueAp* back to the fund?**

AMOUNT RECEIVED = NET ASSET VALUE x NUMBER OF SHARES

AMOUNT RECEIVED = $_____ x 25

AMOUNT RECEIVED = $_____

> Juan has $500 to invest. The broker handling the funds has a loading rate of 5%. How many shares of the *DelawAp* can he buy?

LOADING CHARGE = LOADING RATE x AMOUNT INVESTED

LOADING CHARGE = _____ x $500

LOADING CHARGE = $_____

NUMBER OF SHARES = (INVESTMENT − LOADING CHARGE) ÷ NAV PER SHARE

NUMBER OF SHARES = ($500 − $_____) ÷ $_____

NUMBER OF SHARES = $_____ ÷ $_____

NUMBER OF SHARES = _____

*Time for some practice!*

**4.02**

# Bonds

*Use the chart on page 242 to solve the following problems. Write the correct answer on eaxh line.*

MARKET PRICE  =  QUOTED PRICE  X  PAR VALUE

ANNUAL INTEREST  =  INTEREST RATE  X  FACE VALUE

ANNUAL YIELD  =  ANNUAL INTEREST  +  BOND COST

1.  Larry purchased a $500 Series EE bond. What was the cost of the bond?

   _____

2.  Michelle purchased a $200 Series EE bond. The bond was redeemed after eight years. What was the cost of the bond? How much did she earn?

   cost of the bond_____

   earnings_____

3.  Timmy purchased a $100 Series EE bond with money earned from his paper route. If he keeps the bond for nine years, how much will he earn on his investment?

   _____

4.   Mary Ann's parents purchased a $5000 Series EE bond for her college tuition 10 years ago. How much is the bond worth at this time?

   _____

4.02

# Mutual Funds

*Solve the problems below. Write the correct answer on each line.*

TOTAL MARKET PRICE = OFFER PRICE x NUMBER OF SHARES

AMOUNT RECEIVED = NET ASSET VALUE (NAV) x NUMBER OF SHARES

LOADING CHARGE = LOADING RATE x AMOUNT INVESTED

NUMBER OF SHARES = (INVESTMENT – LOADING CHARGE) ÷ NAV PER SHARE

1. What was the market price for an investor purchasing 125 shares of Phila Fd at $9.31?

_____

2. What amount would be received if 75 shares of Fidelity Fund were sold with a NAV of $14.60?

_____

3. What is the loading charge for a purchase of 300 shares of an AIM Fund bought for a total of $4995 if the loading rate is 1%?

_____

4. How many shares of Dreyfus with an NAV of $9.03 and a 3% loading rate can be purchased with an investment of $1000?

_____
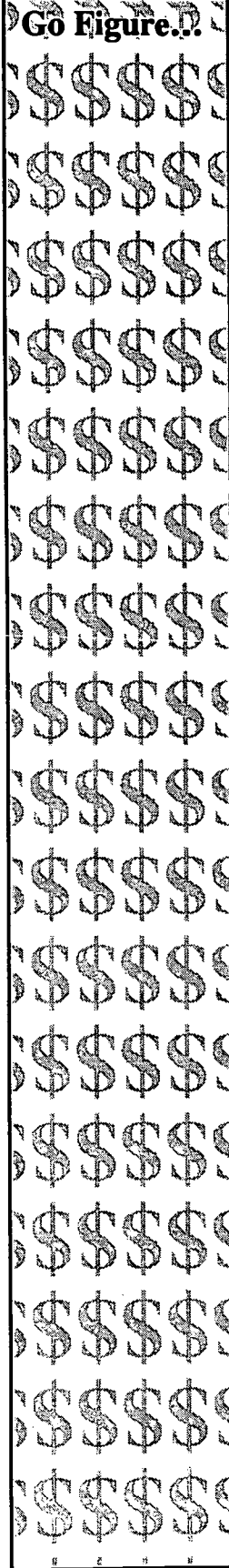
# Stocking Up on the Money

## Stocks

As Juan continued to read, he felt like he was really starting to understand the world of investments. However, Juan wanted to learn more about stocks and stock quotations in the newspaper. He knew that *stocks* were shares of ownership in a corporation. That bit of knowledge was only the beginning.

Juan learned that stocks were divided into classes—*preferred stock* and *common stock*. A preferred stock has its dividend set by the corporation at the time that it is issued. Common stock is the ordinary stock of a corporation, and it does not have a set dividend. Dividends are never guaranteed to be paid for either class of stock. If dividends are paid, they go first to the shareholders of preferred stock.

Juan read that if he invested his money in shares of stock, he would become part owner of the corporation that issues the stock. He thought about that and came up with a wonderful idea. Maybe he could invest his money in shares of stock from the company that he worked for. Then he would be part owner of the company. When he bought the stock, he would receive a stock certificate that would be proof of his ownership.
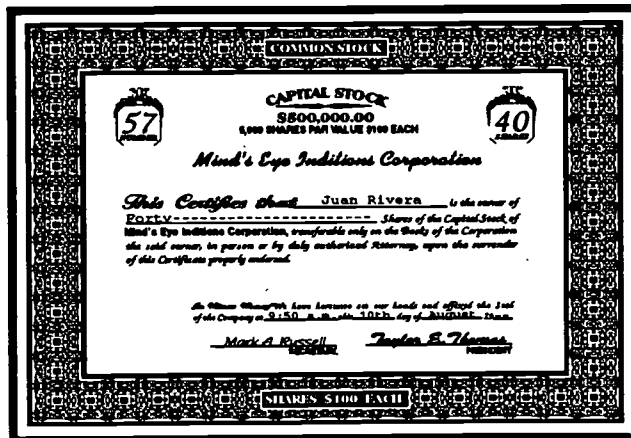
# Investing Your Money

If the company made a **profit**, he would be paid *dividends*. Dividends are paid to the **shareholders**, or those who own shares of corporation stock. The dividends are paid as either a percent of the par value of the stock or as an amount of money per share. This idea of buying stocks was getting more and more exciting for Juan.

**You Try!**

Refer to information given above, to answer the questions below. Use the **Go Figure...** area for any calculations.

> **Juan owns 40 shares of stock for which he paid $31.92 a share. The company paid annual dividends of $1.75 per share. What is the current yield for each share to the nearest hundreth of a percent?**

CURRENT YIELD = ANNUAL DIVIDEND PER SHARE ÷ COST PER SHARE

CURRENT YIELD = $_____ ÷ $31.92

CURRENT YIELD = _____

> **At this rate, how much would Juan earn annually for his 40 shares?**

TOTAL ANNUAL EARNINGS = ANNUAL DIVIDENDS PER SHARE x NO. OF SHARES

TOTAL ANNUAL EARNINGS = _____ x 40

TOTAL ANNUAL EARNINGS = _____

**Go Figure...**

Juan was looking at the Solar Adventures stock. It paid an annual dividend of $3.10 a share. How many shares must he buy to get an annual income of $930 from the investment?

NUMBER OF SHARES = ANNUAL INCOME EXPECTED + ANNUAL DIVIDEND PER SHARE

NUMBER OF SHARES = $_____ + $3.10

NUMBER OF SHARES = _____

What will be Juan's total investment in the Solar Adventures stock if he buys 300 shares at 48 and pays $87 per 100 shares for commission?

TOTAL MARKET PRICE = NO. OF SHARES x COST PER SHARE
TOTAL MARKET PRICE = 300 x $48
TOTAL MARKET PRICE = $_____

COMMISSION = (NO. OF SHARES + 100) x COST PER 100 SHARES
COMMISSION = (300 + 100) x $87
COMMISSION = 3 x $87
COMMISSION = $_____

TOTAL INVESTMENT = TOTAL MARKET PRICE + COMMISSION

TOTAL INVESTMENT = $_____ + $_____

TOTAL INVESTMENT = $_____

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# Investing Your Money

As Juan continued to learn about the stock market, he saw that buying stocks could be a risky investment. If he sold his stock, he could either make a *profit*, *break even*, or take a *loss*. If Juan sold his stock when the price per share was higher than what he paid, he would make a *profit* on the sale. If he sold when the price was lower than his purchase price, he would have a *loss*. The cost of a stock includes its buying price and the stockbroker's commission for buying the stock. .

When stock is bought, a commission and a small Securities and Exchange Commission (SEC) fee are paid by the buyer. Sometimes the state will charge a transfer tax. If the stock is sold through a stockbroker, the seller receives the market price, less the commission, transfer tax, and SEC fee. This amount is called the *net proceeds*.

## You Try!

Refer to the information given above to answer the question below. Use the **Go Figure...** area for any calculations.

> **Juan paid a total of $1276.89, including commission, for 40 shares of stock. He sold the stock for $42.50 a share and paid a sales commission of $35.75. What is the profit or loss from the sale?**

SELLING PRICE = PRICE PER SHARE × NUMBER OF SHARES

SELLING PRICE = $_____ × 40

SELLING PRICE = $_____

**Go Figure...**

PROFIT (LOSS) = (SELLING PRICE − COMMISSION) − BUYING PRICE

PROFIT (LOSS) = ($_____ − $_____) − $1276.89

PROFIT (LOSS) = $_____

In one of his first stock market ventures, Juan had bought 150 shares of stock in Sunny Valley Electric for 7½. He decided that now would be a good time to sell this stock and invest in something that would bring higher returns. The current selling price was 12½. Commission, taxes, and fees were $43.83. What were his net proceeds?

TOTAL MARKET PRICE = NUMBER OF SHARES X SELLING PRICE PER SHARE

TOTAL MARKET PRICE = 150 x $_____

TOTAL MARKET PRICE = $_____

NET PROCEEDS = TOTAL MARKET PRICE − (COMMISSION + TAXES + FEES)

NET PROCEEDS = $_____ − $43.83

NET PROCEEDS = $_____

Looking at the listings of *stock quotations* in the financial
sections of the newspaper was still a little confusing for Juan. His
stockbroker provided a pamphlet with a good diagram of the parts
of the stock quotations. The pamphlet answered many of his
questions, including one about a column labeled **P.E. (price to
earning) ratio.** *P.E.* refers to an approximate ratio that compares
the closing price of a share of stock to its annual earning. For
example, if the P.E. ratio is 7, then the closing price of the stock
is approximately 7 times its annual earnings. The dividends
column gave the amount paid by the corporation per share.
Studying the diagram along with the newspaper made it a lot
easier for Juan to interpret the language used in stock quotations.



*Time for some practice!*

**4.01**

# Cost of Stocks

*Solve the problems below. Write the correct answer on each line.*

TOTAL MARKET PRICE = (COST PER SHARE x NO. OF SHARES) + BROKER'S FEE

EXAMPLE:  TOTAL MARKET PRICE = ($5 x 1000) + $75.50
TOTAL MARKET PRICE = $5000 + $75.50 = $5075.75

| | Cost Per Share | Number of Shares | Total Cost of Shares | Broker's Fee | Total Market Price |
|---|---|---|---|---|---|
| 1. | $5 | 1000 | _____ | $75.50 | _____ |
| 2. | $100 | 75 | _____ | $80.00 | _____ |
| 3. | $42 | 50 | _____ | $63.00 | _____ |
| 4. | $55 | 100 | _____ | $77.00 | _____ |
| 5. | $36 | 200 | _____ | $125.50 | _____ |
| 6. | $100 | 300 | _____ | $900.00 | _____ |
| 7. | $22 | 250 | _____ | $165.00 | _____ |
| 8. | $45 | 125 | _____ | $140.63 | _____ |
| 9. | $6 | _____ | $3000 | $60.00 | _____ |
| 10. | $15 | 150 | _____ | _____ | $2317.50 |

4.01    $

# Dividends Earned

*Solve each problem below. Write the correct answer on each line.*

**TOTAL DIVIDENDS = NO. OF SHARES X DIVIDEND PER SHARE**

| Number of Shares | Dividends Per Share | Total Dividends |
|---|---|---|
| 1.    200 | $.545 | _____ |
| 2.    200 | $.265 | _____ |
| 3.    300 | $.5025 | _____ |
| 4.    250 | $1.105 | _____ |
| 5.    175 | $.75 | _____ |

6. What is the total dividend paid on 150 shares of common stock if it pays $.5025 per share?

_____

7. Eli earned dividends of $.65 on 200 shares of stock he had purchased. What was the total amount of dividends paid?

_____

8. What is the dividend paid on 200 shares of stock if the stock pays $.2850 per share.

_____

**4.01**

# Stocks

*Use yesterday's financial section from the local newspaper and the formulas on pp. 253–256 to answer the following questions. Write the correct answer on each line.*

1.  Thomas purchased 400 shares of stock at 45½ per share with a commission rate of 1%. He sold them a year later at 52¼ and the commission was 1.5%. How much was Thomas' profit?

    _____

2.  What is the total investment for a purchase of 50 shares of stock at 25⅛ with a 2.5% broker's fee?

    _____

3.  Andrea sold 200 shares of stock at 18½. The commission, taxes, and fees were $37.50. What were her net proceeds?

    _____

4.  What stock was most active on the NYSE yesterday, and what volume of shares were traded that day?

    stock _____

    volume _____

5.  Using yesterday's prices, how much would it cost to purchase 300 shares of ITT, not including commission?

    _____

**Go Figure...**

# Real BIG Investing

## Real Estate

*Real estate* is property and exists in different forms:

- land only,
- land with buildings,
- houses,
- apartments,
- condominiums,
- offices,
- stores,
- factories,
- barns, or
- garages.

Investors in real estate can make a profit by (1) renting the property, or (2) selling the property at a higher rate than they bought the property.

Real estate investments often require a large initial investment. Like most investors in real estate, Juan would not have enough money to buy a property. He would have to borrow money from a bank or other lender. He would have to make payments on his mortgage loan, and he would have to pay interest on that loan.

In addition, owning real estate usually involves other expenses. Juan would also have to pay for taxes, insurance, and any repairs that might have to be made to his property. Juan would

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have to consider the expenses of depreciation of his property caused by aging, wear, and tear. Even if Juan took good care of his property, it could become less valuable. It could go out of style or become too expensive to maintain.

If Juan became a real estate owner or investor, he would receive rent from his **tenants,** or persons who pay money to use a house, apartment, or land belonging to someone else. His annual rent would be his **annual rental income** from his investment. However, his **annual net rental income** would be the amount left after paying all of the expenses of owning the property.

**You Try!**

Refer to the information given above to answer the question below. Use the **Go Figure...** area for any calculations.

**Before Juan invested in real estate, he figured what his annual net income would be if he bought a house and lot for $54,000. He would have to pay $15,000 in cash and get a mortgage for the balance. He would rent the house for $800 a month. For the first year, his mortgage interest would be $2680. There would be a 2% depreciation on the assessed value of $45,000. He estimated that taxes, repairs, insurance, and other expenses would be about $4800 for the year. What would be his net income for the year?**

**DEPRECIATION** = 2% x **PROPERTY VALUE**

DEPRECIATION = .02 x $_____
DEPRECIATION = $_____

**ANNUAL EXPENSES** = (**TAXES** + **INSURANCE** + **REPAIRS**) + **DEPRECIATION** + **INTEREST**

ANNUAL EXPENSES = ($_____) + $900 + $_____
ANNUAL EXPENSES = $_____

**ANNUAL RENTAL INCOME** = 12 MONTHS x **RENT PER MONTH**

ANNUAL RENTAL INCOME = 12 x $_____
ANNUAL RENTAL INCOME = $_____

**ANNUAL NET RENTAL INCOME** = **ANNUAL RENTAL INCOME** − **ANNUAL EXPENSES**

ANNUAL NET INCOME = $_____ − $_____
ANNUAL NET INCOME = $_____

Juan looked at his estimated figures and his estimated annual net income. He decided that for right now, real estate demanded more money and time than he could afford. He would stick to his investments in stocks and bonds for right now.

*Time for some practice!*

**Go Figure...**

## Investment Types—
## Their Advantages and Disadvantages

| Investment | Advantages | Disadvantages |
|---|---|---|
| **Passbook Savings Account** | • Money can be deposited and withdrawn freely. <br>• The Federal government guarantees the safety of the account. | • Interest rates are low. <br>• Service charges have to be paid in some institutions if the account falls below a certain amount. |
| **Money Market Account** | • The Federal government guarantees the safety of the investment. <br>• Money can be deposited and withdrawn freely. <br>• Interest rates can appreciate. | • Interest rates can depreciate. <br>• A minimum amount of money is required—$1000 to start an account. |
| **Certificates of Deposit (CD)** | • Interest rates are higher than a passbook account. <br>• The Federal government guarantees the safety of the account. | • The cash is not readily available. <br>• A minimum amount of money is required—$1000 to start an account. <br>• There is a penalty for early withdrawal. |
| **Savings Bonds** | • There is a guaranteed safe 7.5% interest rate after 5 years. <br>• The government periodically updates the interest rates paid to keep them competitive with other investments. <br>• The bonds can be used as collateral. | • The cash is not readily available. <br>• A minimum amount of money is required—$1000 to start an account. <br>• There is a penalty for early withdrawal. |
| **Municipal Bonds** | • No income tax is paid on the interest. (This is very important to wealthy investors.) | • Interest rates are low. <br>• The investment is long term. <br>• Need $5000 to make investment worthwhile. |
| **Corporate Bonds** | • Blue Chip Bonds are a safe investment. <br>• Interest on bonds is paid before stock dividends. <br>• The bonds can be used as collateral. | • Interest rates are low. <br>• Bonds must be bought in large blocks. <br>• Income tax is paid on the interest. <br>• Need $5000 to $10,000 to get started. |
| **Stocks** | • Stocks may appreciate. <br>• Dividends are paid according to the growth of the corporation. <br>• They are very liquid. | • Stocks may depreciate. <br>• They are risk bearing. <br>• Need $500 to $1000 to get started. |
| **Mutual Funds** | • Expert advisers invest for you. <br>• There is no need to study investments. <br>• These investments are very liquid. <br>• Funds may appreciate. | • Investors have control over investments made. <br>• A higher rate of return could be made through self-investment. <br>• Funds may depreciate. <br>• Mutual funds are risk bearing. <br>• Need $500 to $1000 to get started. |
| **Real Estate** | • There is an opportunity for a high rate of return on the investments. <br>• Owners can take advantage of reduced income tax. <br>• Owners are able to borrow money to pay for Real Estate. | • Property taxes and interest on loans may decrease profit. <br>• Real estate may become difficult to sell. <br>• Rental property may have no tenants or mayneed major repairs. <br>• Need $5000 to $10,000 to get started. |
| **Commodities Market** | • Investment can take advantage of futures. <br>• These investments are very liquid. <br>• A high rate of return is possible. | • Commodities are very high risk. <br>• Investors must study the market thoroughly before investing. <br>• Need a great amount of knowledge and $10,0000 to get started. |
| **Precious Metals** | • These investments are very liquid. <br>• Precious metals are taken throughout the world. <br>• A high rate of return is possible. | • Precious metals are a very high risk. <br>• Bullion or coins must be stored in a safe place. <br>• Investor must investigate investment companies. <br>• Need $1000 to $5000 to get started. |

# Investments

*Use the formulas on p. 263 to solve the problems below. Write the correct answer on each line.*

1.  Lindsay bought a house for $75,000. Her taxes, insurance, and repairs for the year were $2850. Depreciation was 2 ½% on the assessed valued of $54,000. The interest paid this year on the mortgage was $2060. What were Lindsay's annual expenses for the house?

    _____

2.  Terry has invested his money in a house. He is going to rent it to a tenant for $820 per month. What will be his annual rental income?

    _____

3.  Mr. and Mrs. Rutger bought a house for $50,000. They rent the house to a college student for $575 a month. The annual expenses are 3% depreciation on the assessed valued of $46,500; mortgage interest of $2100; and $2320 for taxes, repairs, and insurance. What is the annual rental income? What are the annual expenses? What was her annual net rental income?

    annual rental income_____

    annual expenses _____

    annual net rental income_____

4.  Tonya bought a house for $65,000. She want to rent the house to a tenant for $950 a month. For the first year her expenses were: mortgage interest of $2950; taxes, repairs, and insurance of $4500; and 2% depreciation on the house valued at $54,000. What will her annual net rental income be?

    _____

4.04-4.05

# Investments

*Refer to the Investment Types table on page 264 to help you answer the following questions. Use your own paper.*

1. As a graduating senior from high school, with a part-time job, what would be your first investment choice? How much would you invest? Why would you make these choices?

2. Name at least three kinds of financial experts whom you would need to contact in order to develop and carry out your investment plan.

3. You are an unmarried, 30 yr. old businessperson with a salary of $38,900 per year. List three investments that you would make within the next five years to reach your long-term investment goal. Complete the chart below listing the investments in the order that you would make them.

| Your Investment | Advantages | Disadvantages |
|---|---|---|
| 1. | | |
| 2. | | |
| 3. | | |

4. Choose one investment from the list above that will best achieve your long-term investment goal. What amount would you invest, and what would be the terms of your investment?
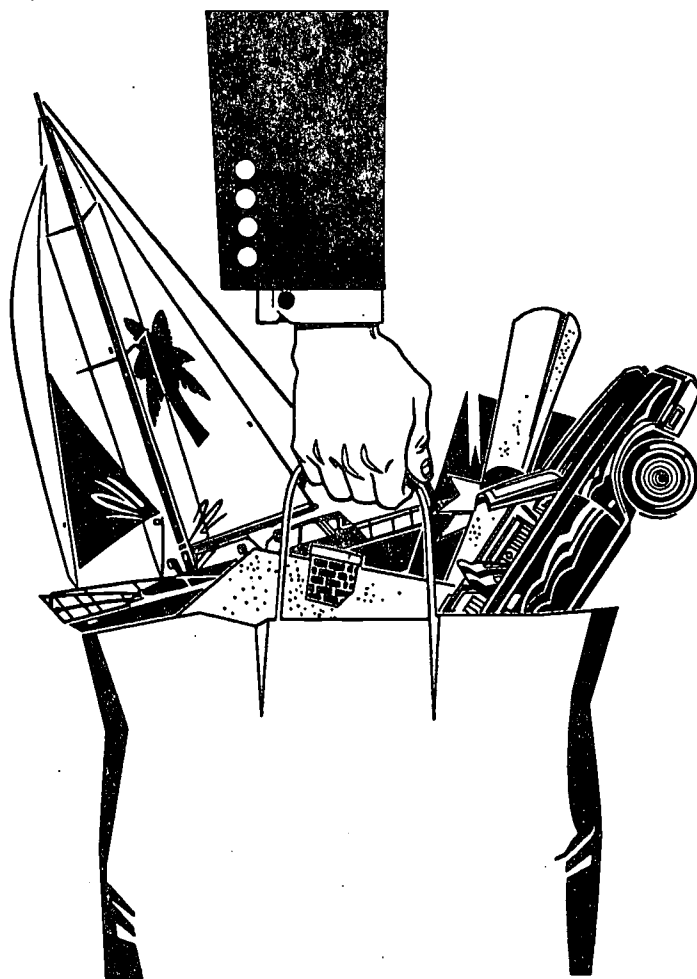
# 9

# Planning for Retirement

## Vocabulary

*Study the terms and their definitions below.*

### Life Insurance

beneficiary ........................... the person to whom life insurance benefits are paid when the insured dies

cash value ............................ the value of an insurance policy if it is cancelled; also called *cash surrender value*

coverage ............................... protection

endowment life insurance .. provides protection for a fixed time; at end of fixed time owner of insurance receives cash equal to the amount of protection

insured ................................. person covered by an insurance policy

insurer ................................. the insurance company

life insurance ....................... financial protection that pays persons you've selected in case of your death

policy ................................... a contract

premium .............................. payments made or the amount paid for insurance

straight life insurance ......... provides protection for a lifetime; payment is made for a fixed time only

Go Figure...
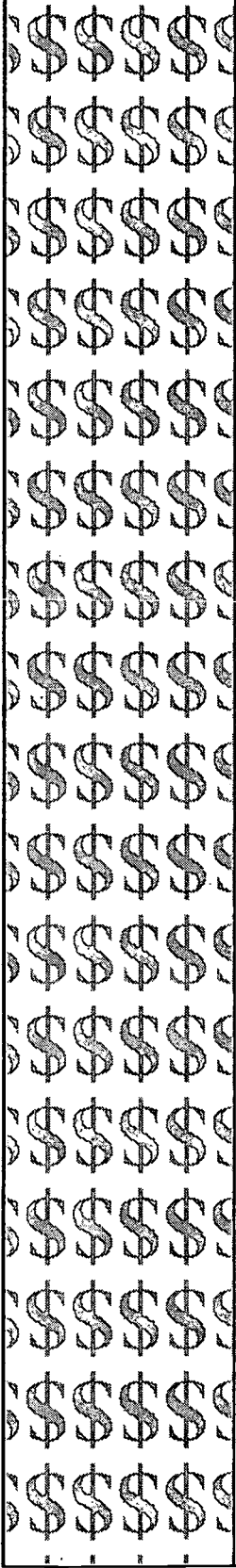
**term life insurance** .............. provides protection for a fixed time only; payment is made for a fixed time only

**whole life insurance** ............ provides protection for a lifetime; payment is made for a lifetime; has cash value

## Social Security Benefits

**hospital insurance** ............... insurance that pays some or all of the cost of hospital care

**medical insurance** ............... insurance that pays for medical costs not covered by hospital or surgical insurance

**Medicare** ............................. a health insurance program for people 65 and older, and for some people under 65 who are disabled

**retire** .................................... to stop working and live off of one's savings and other income

**retirement benefit** ............... an amount of money paid monthly by the Social Security Administration to an eligible retiree

**Social Security** ..................... a federal law (FICA) to provide hospitalization insurance for people over 65, retirement income, survivor's benefits, and disability benefits; the money for this program is provided by a tax paid by employers and employees

# Planning for Retirement
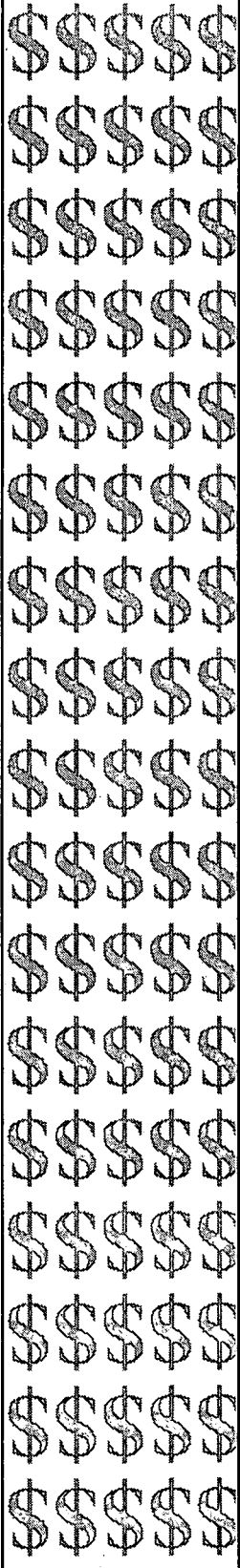
## Retirement Investing

annuity ................................ an investment on which one receives fixed payments for a lifetime or for a specified number of years

common stocks .................... shares of ownership in a corporation issuing the stock

early withdrawal penalty ... a tax penalty applied to any amounts withdrawn before a contributor reaches a given age, dies, or is disabled

individual retirement
annuity (IRA) ...................... a retirement plan to which an individual may make tax deductible contributions of 100% of income, not to exceed $2000 per calendar year (or the allowable deductible contribution under the Internal Revenue Code)

inflation ............................... an economic condition in which the price of goods and services rises more quickly than people's income

Keough Account (HR-10)... a tax-sheltered retirement plan for people who are self-employed

pension ............................... money paid regularly to retired people by the company or government they worked for

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**Go Figure...**
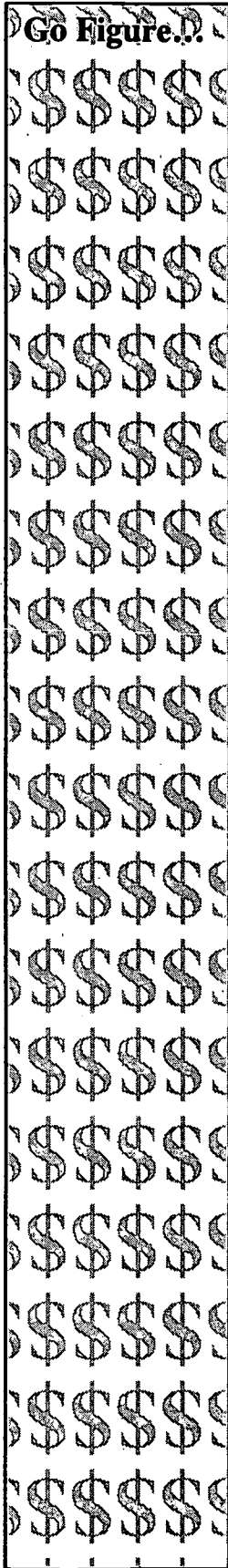
**rate of benefit** ...................... the percentage of an employee's salary that is paid by the company after retirement

**rollover** ............................... an extension, renewal, or deferring of a financial obligation, investment, or tax

**variable annuity fund** ......... a fund that permits the investor to buy a group of common stocks selected by an investment company

**Go Figure...**

## Securing the Future

### Life Insurance

Angela wanted to have a family sometime in the future. So she began thinking about protecting her children. If she had children, she wanted them to be provided for if she were to die. To protect her property, Angela Gibson had taken out insurance policies on her home and her automobile. To protect her children, Angela decided to purchase **life insurance**.

A life insurance **policy**, or contract, would pay the person(s) of her choice a set amount of money if she were to die. After her children were born, Angela would make them the **beneficiaries**, or the people who would receive the money paid when she died. For now she would choose her sister as the policy's beneficiary.

On her policy, she would be the **insured**, or the person covered by the policy. The company who provides the insurance is the **insurer**. The payments she would make to the insurer are called *premiums*. The amount of the premiums would vary depending on her age, how much insurance she bought, and which type of policy she selected. Premiums are paid monthly, quarterly, semiannually, yearly, or in any pattern that is stated in the policy. Life insurance companies offer four types of life insurance. Each type of insurance provides different kinds of **coverage**, or protection.

**Whole life insurance.** You pay premiums and receive coverage for a lifetime. In addition, the policy has a **cash value**—you receive money or a portion of the money paid on the policy if you cancel the policy. You can also borrow against the value of the policy.

**Term life insurance.** You pay premiums and receive coverage for a fixed time only; the policy has no cash value.

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**Go Figure...**
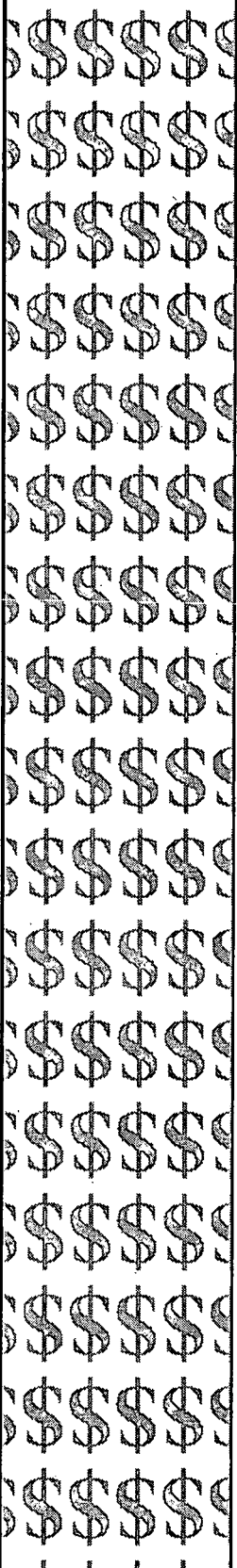
**Straight life insurance.** You pay premiums for a fixed time, such as 20 years, but the policy provides coverage for your entire life; also called *limited payment life insurance.*

**Endowment life insurance.** You pay premiums and receive coverage for a fixed time, such as 20 years. However, at the end of the fixed time, you are paid cash for the amount of the policy and the insurance protection ends.

Regardless of which policy Angela chooses, if she were to die while the policy was in effect, her beneficiary would receive the *face value* of the insurance policy. The *face value* is the amount of insurance coverage on the insured.

**You Try!**

Refer to the information given and the chart below to answer the following question. Use the **Go Figure...** area for any calculations.

| Annual Premiums Per $1000 of Life Insurance | | | | | |
|---|---|---|---|---|---|
| **Age** | | **Term to Age 65** | **Whole Life** | **20-Year Payment** | **20-Year Endowment** |
| **Male** | **Female** | | | | |
| 20 | 25 | $ 7.01 | $ 13.61 | $ 25.16 | $ 45.22 |
| 25 | 30 | 7.87 | 15.57 | 27.63 | 45.49 |
| 30 | 35 | 9.03 | 18.30 | 30.60 | 46.04 |
| 35 | 40 | 10.66 | 21.74 | 33.97 | 47.42 |
| 40 | 45 | 12.93 | 26.25 | 38.69 | 49.13 |
| 45 | 50 | 15.88 | 32.15 | 44.49 | 52.56 |
| 50 | 55 | 20.27 | 39.92 | 51.38 | 57.23 |
| 55 | 60 | 28.43 | 49.49 | 60.15 | 63.00 |

**Angela is 25 years old. She is considering purchasing a $50,000, 5-year whole life insurance policy. What would be the cost of her annual premium?**

# Planning for Retirement

NUMBER OF UNITS PURCHASED = FACE VALUE + UNIT VALUE

NUMBER OF UNITS PURCHASED = $50,000 + $1000

NUMBER OF UNITS PURCHASED = _____

ANNUAL PREMIUM = NUMBER OF UNITS PURCHASED X PREMIUM PER $1000

ANNUAL PREMIUM = _____ x $_____

ANNUAL PREMIUM = $_____

Angela decided to examine the cost of the endowment life insurance plan with the whole life. She plans to use the cash for her future retirement. She wants to purchase a 20-year endowment life insurance policy valued at $75,000. How much would her annual premium be?

NUMBER OF UNITS PURCHASED = FACE VALUE + UNIT VALUE

NUMBER OF UNITS PURCHASED = $_____ + $1000

NUMBER OF UNITS PURCHASED = _____

ANNUAL PREMIUM = NUMBER OF UNITS PURCHASED X PREMIUM PER $1000

ANNUAL PREMIUM = _____ x $_____

ANNUAL PREMIUM = $_____

**Go Figure...**
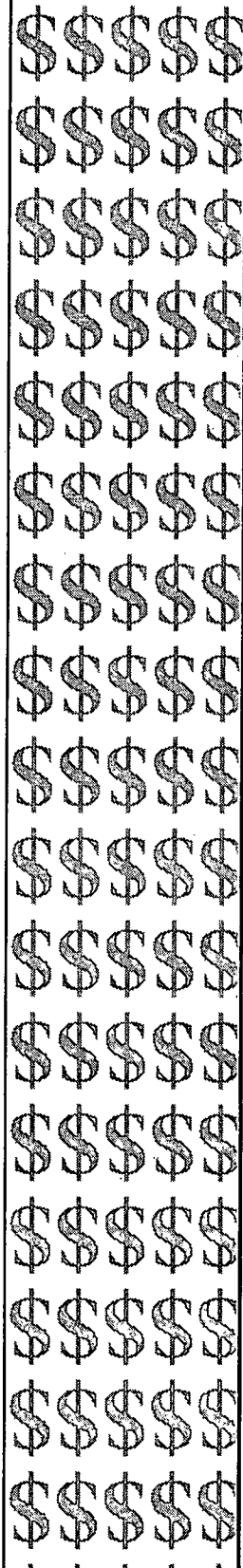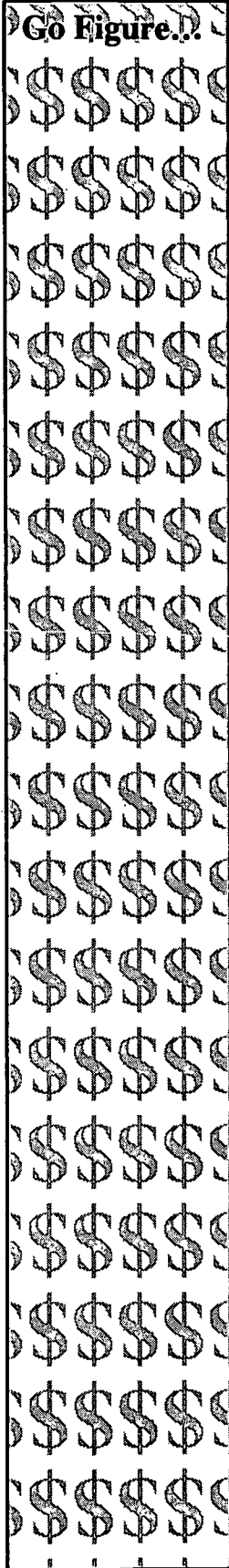
Angela decided that the $75,000 20-year endowment life insurance policy would give her the most options. At the end of 20 years she could use her $75,000 to either purchase more insurance or she could invest or save her money. The insurance company collects life insurance premiums annually, or once a year. However, for a small charge, the insurance company would let her pay the premium either *semiannually*, twice a year, or *quarterly*, four times a year.

**You Try!**

| Optional Payment Plans Percent of Annual Premium |
| --- |
| Semiannual Premiums = 50.5% |
| Quarterly Premiums = 25.5% |
| Monthly Premiums = 8.5% |

Refer to the information given above and in the chart to answer the question below. Use the **Go Figure...** area for any calculations.

Angela has decided to purchase a 20-year endowment life insurance plan with a face value of $75,000. Her annual premium is $3391.50. She decided that paying her premiums four times a year would be much easier on her budget. What will her quarterly premium be?

QUARTERLY PREMIUM = PERCENT X ANNUAL PREMIUM

QUARTERLY PREMIUM = _____ % X $_____

QUARTERLY PREMIUM = .255 x $3391.50

QUARTERLY PREMIUM = $_____

*Time for some practice!*

# Planning for Retirement

## Life Insurance

*Use the table on page 274 to solve the problems below. Write the correct answers on the lines provided.*

ANNUAL PREMIUM = NUMBER OF UNITS PURCHASED x PREMIUM PER $1000

NUMBER OF UNITS PURCHASED = FACE VALUE ÷ UNIT VALUE

| | Insured | Age | Ann. Prem. per $1000 | Type of Coverage | Coverage | No. Units | Ann. Prem. |
|---|---|---|---|---|---|---|---|
| 1. | Angela | 25 | _____ | term | $25,000 | ____ | _____ |
| 2. | Randy | 32 | _____ | whole | $50,000 | ____ | _____ |
| 3. | José | 45 | _____ | 20-year | $10,000 | ____ | _____ |
| 4. | Helen | 60 | _____ | 20-yr. endow. | $75,000 | ____ | _____ |
| 5. | Stefan | 50 | _____ | term | $30,000 | ____ | _____ |
| 6. | Gërta | 35 | _____ | 20-yr. endow. | $80,000 | ____ | _____ |
| 7. | Henry | 55 | _____ | whole | $20,000 | ____ | _____ |
| 8. | Jim | 45 | _____ | 20-yr. | $45,000 | ____ | _____ |

9. Juan decided to protect his family by taking out a term life insurance policy for $75,000. He is 30 years old. What is the cost of his annual premium?

_____

10. Jamie wants to buy a $540,000 whole life policy. She is 35 years old. What will her annual premium be?

_____

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10.02

# Life Insurance

*Using the table on page 276, solve the problems below. Write the correct answer on each line. Round the answers to the nearest cent.*

**SEMI-ANUUAL PREMIUM = PERCENT x ANNUAL PREMIUM**

**QUARTERLY PREMIUM = PERCENT x ANNUAL PREMIUM**

**MONTHLY PREMIUM = PERCENT x ANNUAL PREMIUM**

| | Insured | Annual Premium | Payment Plan | Premium Due |
|---|---|---|---|---|
| 1. | Angela | $389.25 | Semi-annual | _____ |
| 2. | Randy | $1530.00 | Quarterly | _____ |
| 3. | José | $258.60 | Semi-annual | _____ |
| 4. | Helen | $1484.70 | Monthly | _____ |
| 5. | Stefan | $3082.80 | Quarterly | _____ |
| 6. | Gërta | $1087.00 | Monthly | _____ |
| 7. | Antwann | $1216.20 | Semi-annual | _____ |
| 8. | Jamal | $2102.40 | Quarterly | _____ |

9. Juan decided to pay his life insurance policy on a quarterly basis. If his annual premium is $677.25, what will be the cost of his quarterly premiums?

_____

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# Pay In ... Take Out

## Social Security Benefits

A part of Angela's future is being insured by the government.
Just like all other employees, employers, and self-employed
workers, Angela paid taxes under the Federal Insurance
Contributions Act (FICA) or **Social Security**. *Social Security,*
or *FICA,* is a federal law providing hospitalization insurance
for people over 65, retirement income, survivor's benefits, and
disability benefits. The money for the *Social Security* program
is provided by a tax paid by employers and employees.

## The Social Security System
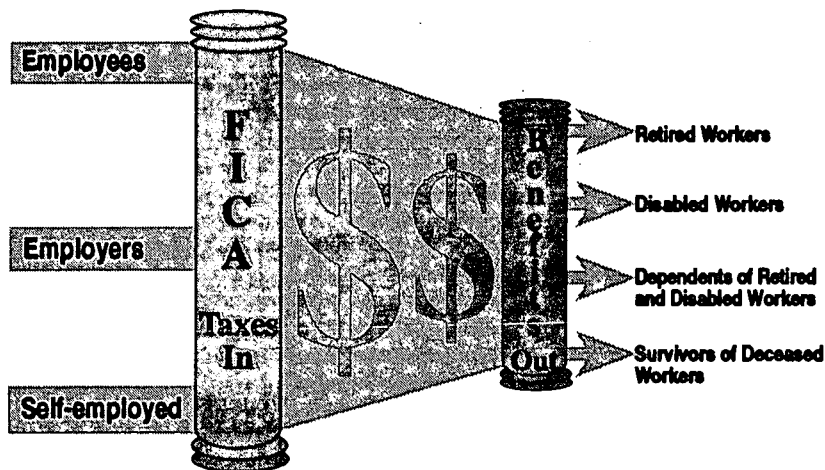


Angela's contribution to Social Security is deducted regularly
from her paycheck. Angela is taxed a percentage of the total
amount of money that she earns. Her employer sends her
contribution to the federal government. Her employer also
sends a matching contribution. For example, if $423.50 is
deducted from Angela's check to pay for her contribution, then
her employer must also pay $423.50. That means that the total
sent to the government is 2 x $423.50, or $847.
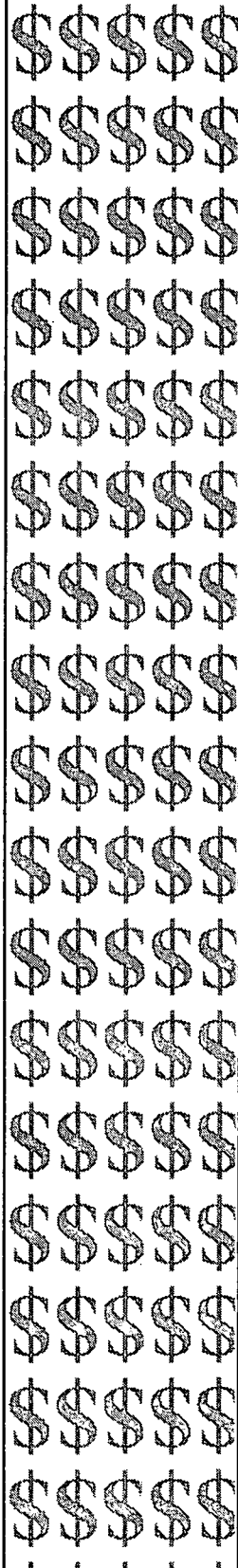
**Go Figure...**

Even the people who are self-employed, or work for themselves, must pay a FICA tax. The rate of tax paid by the self-employed is higher than that paid by regular employees. There is no employer to match their contribution amount.

**You Try!**

Refer to the information given above and the table below to answer the following questions. Use the **Go Figure...** area for any calculations.

| Year | Maximum Gross Income Subject to Tax | FICA Tax Rates | | | |
| --- | --- | --- | --- | --- | --- |
| | | Employees | | Self-Employed | |
| | | Tax Rate | Maximum Contribution | Tax Rate | Maximum Contribution |
| 1988 | $45,000 | 7.15% | $3217.50 | 10.00% | $4500.00 |
| 1989 | $48,000 | 7.15% | $3432.00 | 10.00% | $4800.00 |
| 1990 | $51,300 | 7.65% | $3924.45 | 10.00% | $5130.00 |
| 1991 | $53,400 | 7.65% | $4085.10 | 10.00% | $5340.00 |
| 1992 | $53,000 | 7.65% | $4054.50 | 10.00% | $5300.00 |
| 1993 | $57,600 | 7.65% | $4408.40 | 10.00% | $5760.00 |
| 1994 | $60,600 | 7.65% | $4635.90 | 10.00% | $6060.00 |

**Angela's gross income for 1993 was $39,765. How much FICA was deducted from her income? How much did her employer contribute annually?**

FICA TAX = TAX RATE x GROSS INCOME SUBJECT TO TAX

FICA TAX = _____ % x $_____

FICA TAX = _____ x $_____

FICA TAX = $_____

AMOUNT EMPLOYER CONTRIBUTED ANNUALLY = $_____

# Planning for Retirement

Angela knew that she would not be able to **retire** and receive Social Security **retirement benefits**—the amount of money paid monthly by the Social Security Administration to an eligible person retiring—until she was 62 years old. She also knew that the longer she delayed her retirement, the larger her monthly benefits would be.

## Medicare

The government, through the FICA tax, has also made some provisions to pay for Angela's future medical expenses. They have provided a health insurance program for people 65 years old and older. This health insurance program is also for some people who under 65 years old, but are disabled. The name of this government insurance program is *Medicare*.

The *Medicare* insurance program includes both **hospital insurance** and **medical insurance**. *Hospital insurance* is insurance that pays all or some of the cost of being in a hospital for medical care. *Medical insurance* pays for the costs of an illness not covered by hospital or surgical-medical insurance. Just like private hospital and medical insurance plans, *Medicare* does not provide complete coverage for all hospital and medical costs. See the chart below for some examples.

| Examples of Hospital and Medical Insurance Coverage | | |
|---|---|---|
| | **Hospital Insurance** | **Medical Insurance** |
| **Covered** | • Semi-private room<br>• Regular nursing services | • Physician's services<br>• Casts, wheelchairs |
| **Not Covered** | • Convenience Items<br>  TV<br>  Telephone | • Prescription drugs<br>• Routine physical exams<br>• Eyeglasses, hearing aids |
| **Cost to Patient** | • $180 deductible | • $60 deductible<br>• 20% of remaining cost |

You Try!

Refer to the information and the chart on the previous page to answer the following question. Use the **Go Figure...** area for any calculations.

Angela's mother is 66 years old. She has Medicare hospital and medical insurance. Mrs. Gibson was admitted to the hospital this past year. Her bill was $3290, including $50 for TV. Her physician's fee was $760. Her charge for prescription drugs was $340. What was her share of the total cost? *Note: figure her hospital and medical costs separately; then add them together.*
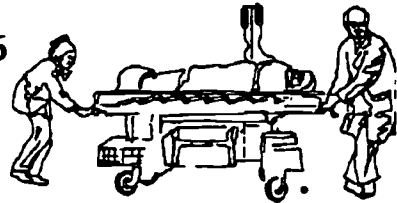
1. FIND THE PATIENT'S SHARE OF THE HOSPITAL COST.

PATIENT'S SHARE OF HOSPITAL COST = DEDUCTIBLE CHARGES + UNCOVERED EXPENSES

PATIENT'S SHARE OF HOSPITAL COST = $_____ + $50

PATIENT'S SHARE OF HOSPITAL COST = $_____

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# Planning for Retirement

**2. FIND THE PATIENT'S SHARE OF THE MEDICAL COST.**

MEDICAL COST = DEDUCTIBLE + UNCOVERED EXPENSES + 20%(PHYSICIAN'S FEE − DEDUCTIBLE)

MEDICAL COST = $60 + _____ + 20%($760 − $60)

MEDICAL COST = $60 + $340 + (.20 × $700)

MEDICAL COST = $60 + $340 + _____

MEDICAL COST = $_____

**3. FIND THE PATIENT'S SHARE OF THE TOTAL COST.**

TOTAL COST = PATIENT'S SHARE OF HOSPITAL COST + PATIENT'S SHARE OF MEDICAL COST

TOTAL COST = $_____ + $_____

TOTAL COST = $_____

Helping her mother with her insurance helped Angela to better understand what Medicare insurance was all about. Angela was happy that she would not have to think about Medicare insurance for quite some time.

*Time for some practice!*
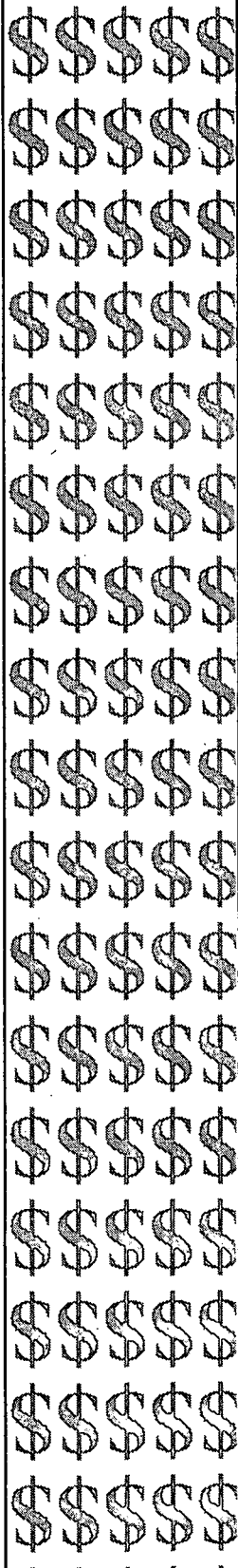
**$** 10.03

# Social Security or FICA

*Use the table on page 280 to solve the problems below. Write the correct answer on each line.*

SOCIAL SECURITY TAX = TAX RATE X EARNINGS

| | Name | Gross Income | Year | Soc. Sec. Status | Tax Amount |
|---|---|---|---|---|---|
| 1. | Angela | $28,000 | 1990 | self-employed | _____ |
| 2. | Randy | $60,200 | 1994 | employee | _____ |
| 3. | Chris | $48,400 | 1990 | employee | _____ |
| 4. | Helen | $53,200 | 1991 | self-employed | _____ |
| 5. | Stefan | $46,000 | 1989 | self-employed | _____ |
| 6. | Greta | $58,300 | 1994 | self-employed | _____ |
| 7. | Henry | $52,500 | 1990 | employee | _____ |
| 8. | Jim | $19,000 | 1994 | employee | _____ |

9. Juan's annual salary in 1990 was $23,900. How much Social Security tax did he pay if he was self-employed?

_____

10. Jamie earned $55,900 at her job at the university in 1994. What was the amount of her FICA deduction? How much did the university contribute?

FICA _____

university's share _____

# Planning for Retirement

# Medicare

*Use the table on p. 281 to solve the the problems below. Write the correct asnwers on the lines provided.*

> PATIENT'S SHARE OF HOPITAL COST = DEDUCTIBLE CHARGES + UNCOVERED
> EXPENSES
>
> PATIENT'S SHARE OF MEDICAL COST = DEDUCTIBLE + UNCOVERED EXPENSES +
> 20%(PHYSICIAN'S FEE − DEDUCTIBLE)
>
> TOTAL COST = PATIENT'S SHARE OF HOSPITAL COST + PATIENT'S SHARE OF
> MEDICAL COST

1. Stefan's elderly aunt was hospitalized for several days last month. She was not sure how to figure her cost for medical expenses. Her bill was $6480, including $50 for TV. The physician's fees were $1500 and her prescription drugs came to $560. What was her share of the total cost?

   hospital cost _____

   medical cost _____

   total cost _____

2. Chris's grandfather had a stroke and was hospitalized last week. He is unable to handle his affairs. Chris needs to determine his grandfather's expenses in order to pay the bills. The hospital sent a bill for $15,000 including $250 for telephone and long distance service and $3280 for physician services. His prescription fees were $500. What was his grandfather's share of the total cost?

   hospital cost _____

   medical cost _____

   total cost _____

**$** 10.03

3.  Helen's sister had major surgery 3 weeks ago. She asked Helen to help her determine the cost of her hospital expenses. The hospital sent a a bill for $15,000 including $50 for TV, $30 for telephone service, $400 for prescriptions, and $4800 for physician's services. What was her share of the total cost?

    hospital cost _____

    medical cost _____

    total cost _____

4.  Henry's sister fell and broke her hip bone and was hospitalized last week. Henry decided to help her to determine the expenses. The hospital sent a bill for $12,000 including $50 for telephone and TV, $200 for prescriptions, and $2500 for physician services. What was her share of the total cost?

    hospital cost _____

    medical cost _____

    total cost _____

5.  Henry's sister had to go back in the hospital to reset the hip bone. She had to stay in the hospital. Henry helped her to determine the new expenses. The hospital sent the new bill for $13,000 including $50 for TV and telephone, $220 for prescriptions, and $2500 for physician service. What was her new share of the total cost?

    hospital cost _____

    medical cost _____

    total cost _____

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# Investing for Future Returns

## Retirement Investing

Angela continued to plan for the future. Life insurance would provide for her future children if she died. Social Security would pay for part of her medical expenses and living expenses. But where would she get the rest of the money to live on during her retirement? *Retirement* is the act of no longer working at one's profession or business.
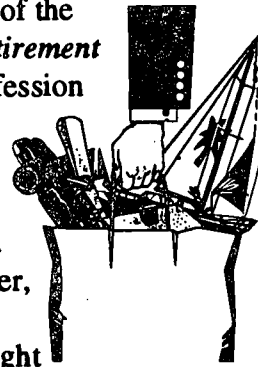
Angela knew that she wanted to enjoy her present way of living long after she stopped working. She also wanted to travel, volunteer, take classes—all the things that she didn't presently have time for. She had never thought about how she'd be able to afford to do those things without a job.

Like others who worked for the design company, she would receive a **pension**. Most companies pay money regularly to the retired people who worked for them. Angela's pension would be based on her *final average salary* before her retirement. It would also be based on the number of years of service that she had with the company and on the company's **rate of benefit**. The *rate of benefit* is the percentage of an employee's salary that is paid by the company after retirement.

Companies usually decided on the amount of an employee's annual pension by first finding a final average salary. They average the employee's salary for a set number of years. Then they multiply that average salary by the employee's number of years of service and their *rate of benefit*. The formula looks like this:

ANNUAL PENSION = FINAL AVERAGE SALARY X YEARS OF SERVICE X RATE OF BENEFIT

**Go Figure...**
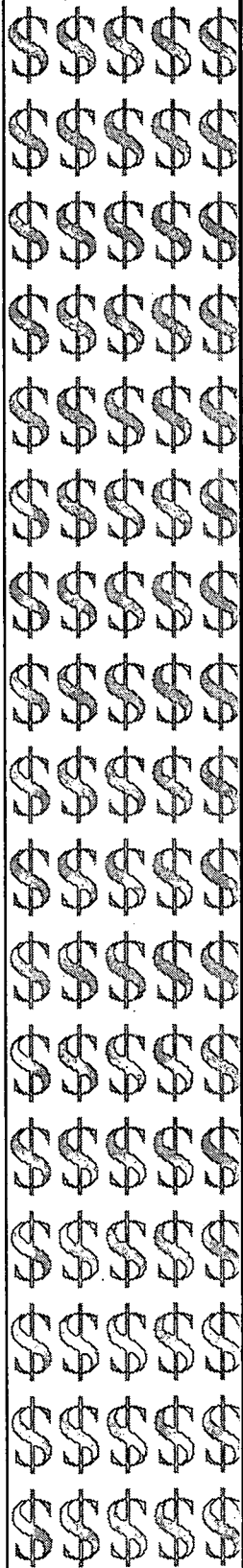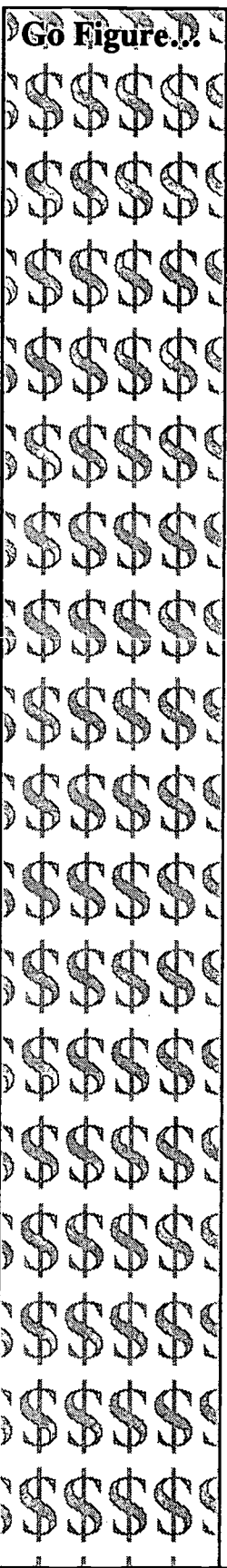
Angela knew that the amount of her annual *pension* would be much smaller than her annual salary.

**You Try!**

Refer to the information given above to answer the following question. Use the **Go Figure...** area for any calculations.

**Angela guessed that she would probably retire from the design company after 22 years of service. Her final salary would be based on her average salary during her last five years of work service. If her last five yearly salaries were $56,000; $57,900; $58,200; $59,100; and $61,200 and the company's rate of benefit is 1.5%, what will her annual pension be?**

FINAL AVERAGE SALARY = SUM OF LAST FIVE YEARS OF SALARIES ÷ 5

FINAL AVERAGE SALARY = ($56,000 + $57,900 + $58,200 + $59,100 + $61,200) ÷ 5

FINAL AVERAGE SALARY = $_____ ÷ 5

FINAL AVERAGE SALARY = $_____

ANNUAL PENSION = FINAL AVERAGE SALARY x YEARS OF SERVICE x RATE OF BENEFIT

ANNUAL PENSION = $_____ x 22 x 1.5%

ANNUAL PENSION = $_____ x 22 x .015

ANNUAL PENSION = $_____

## Annuities

Angela knew that her pension would not be enough to cover her expenses after she retired. She attended a session in which, an insurance representative spoke to the design company employees about planning for retirement.

The representative spoke about a very special kind of savings accounts that he called *annuities*. An **annuity** is an investment in which one receives fixed payments for a lifetime or for a specified number of years.

## Individual Retirement Annuities (IRAs)

The insurance agent described one annuity that interested Angela. **Individual retirement annuities (IRAs)** are special kinds of retirement plans. The government permits people who contribute to an IRA to deduct their contributions from their gross taxable income. An individual may contribute 100% of their earned income. However, those contributions should not exceed $2000 per calendar year.
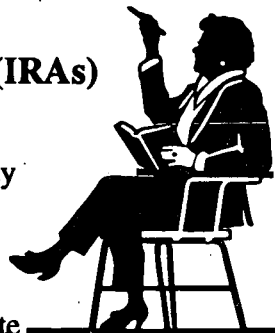
The payments or premiums for this account are flexible—a person may start, stop, increase, or decrease his or her contributions to an IRA at any time. IRAs are available for sale
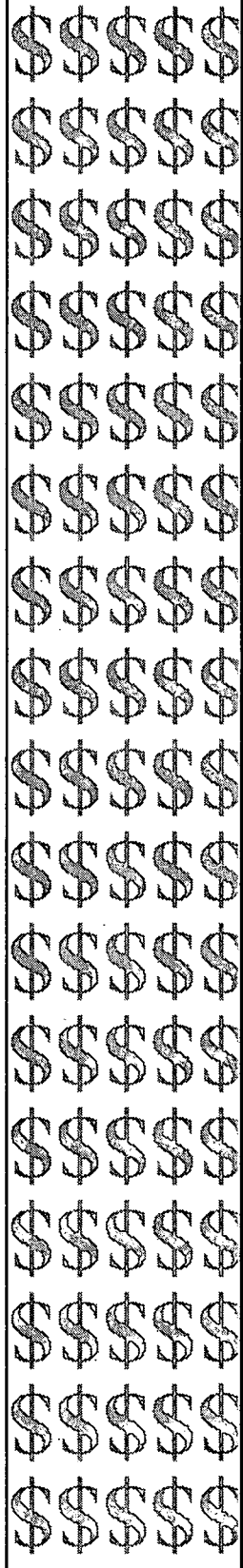
to the general public. The participant can be from 18 years to 59½ years of age.

IRAs are intended to help individuals prepare for their retirement. They may not be used like ordinary savings accounts. They are subject to many restrictions imposed by the Internal Revenue Code. Like most annuities, the IRAs have an early withdrawal penalty. This is a 10% tax penalty that is applied to any amounts withdrawn from an annuity before the contributor reaches a given age, dies, or is disabled.

| Estimated Growth of IRA Contributions | | |
|---|---|---|
| Years of IRA Contributions | Estimated Accum. Bal. @ 4% Interest | Estimated Accum. Bal. @ 8% Interest |
| 1 | $  1,036.26 | $  1,073.26 |
| 5 | 5,614.26 | 6,228.52 |
| 10 | 12,443.54 | 14,887.08 |
| 15 | 20,750.79 | 26,501.58 |
| 20 | 30,855.92 | 41,711.94 |
| 25 | 43,149.00 | 61,296.00 |
| 30 | 58,100.32 | 86,200.64 |
| 35 | 76,288.61 | 117,577.22 |
| 40 | 98,413.18 | 156,826.36 |
| 45 | 125,335.45 | 205,570.90 |

This penalty applies in addition to the income tax that is due on the amounts withdrawn.

There is a *maximum allowable* restriction on IRA accounts. Contributions that exceed the $2000 are not deductible from income tax. However, contributions to IRAs are allowed to rollover. A *rollover* is an extension, renewal, or deferring of a financial obligation, investment, or tax. If contributions are allowed to remain in an account, they increase in value from the interest added. The new amounts will also be deductible from income tax.

| Estimated Growth of Rollover IRA Contributions | | |
|---|---|---|
| Tax Year after Deposit | Estimated Accum. Bal. @ 4% Interest | Estimated Accum. Bal. @ 8% Interest |
| 1 | $  1,036.26 | $  1,073.26 |
| 10 | 1,475.46 | 2,145.66 |
| 20 | 2,184.03 | 4,632.30 |
| 30 | 3,232.90 | 10,000.80 |
| 40 | 4,785.49 | 21,590.97 |
| 45 | 5,822.28 | 31,724.22 |

The agent explained that there was another IRA that might interest Angela and her coworkers. The **Keough Account (HR-10)** is a retirement plan for people who are self-employed. Some of her friends had their own part-

## Planning for Retirement

time consultant design businesses. They would be eligible for *Keough Accounts.*

Participants in a Keough account can contribute up to 15% of their annual gross income, with a maximum of $7500. If any withdrawals are made before age 59½, a penalty must be paid. The Keough plan does have an income tax advantage. The annual amount contributed and the interest earned are not subject to income tax. So, participants' annual contributions also reduce the amount of taxable income. They pay less federal income tax (FIT). Angela hoped to one day start her own business.

**You Try!**

Refer to the information given above to answer the following question. Use the **Go Figure...** area for any calculations.

**Eventually Angela did start her own design consulting business. Her annual gross income was $39,750. Her taxable income after deducting business expenses was $32,500. Her federal income tax (FIT) was 20% of her taxable income. Angela contributed 10% of her gross income to her Keough account. This contribution reduced her federal income tax to 18% of her taxable income. How much did she save in federal income tax?**

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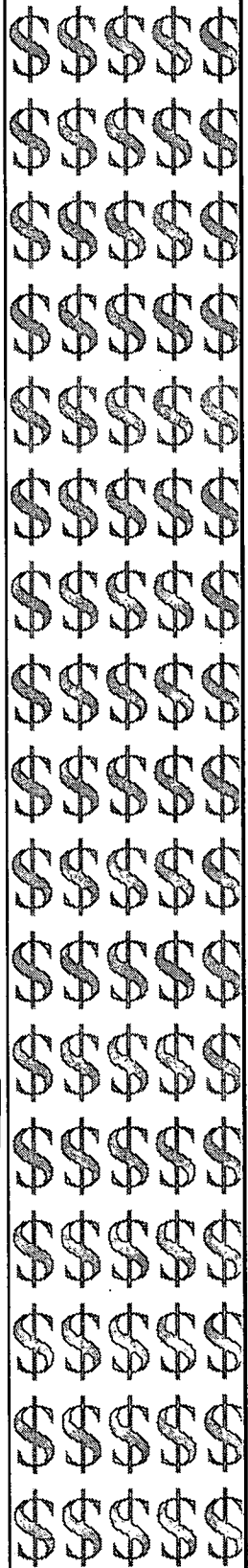
**Go Figure...**
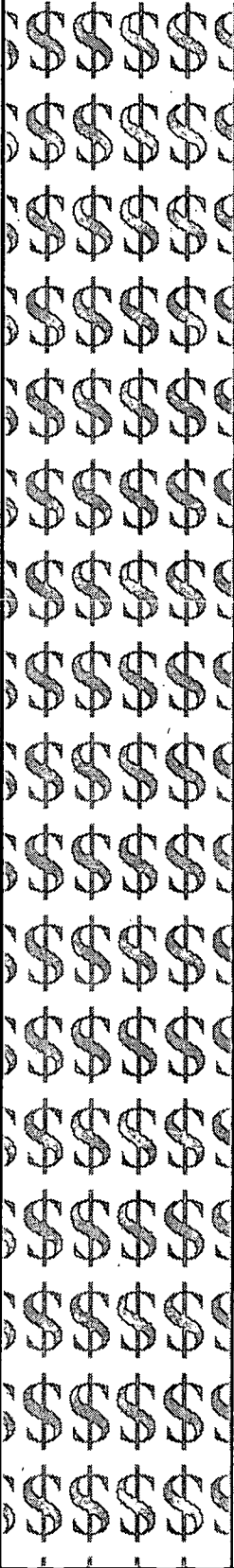
1. FIND ANGELA'S FIT BEFORE KEOUGH CONTRIBUTION

FIT BEFORE KEOUGH CONTRIBUTION = FIT RATE x TAXABLE INCOME

FIT BEFORE KEOUGH CONTRIBUTION = 20% x $_____

FIT BEFORE KEOUGH CONTRIBUTION = .20 x $32,500

FIT BEFORE KEOUGH CONTRIBUTION = $_____

2. FIND ANGELA'S CONTRIBUTION TO KEOUGH

CONTRIBUTION TO KEOUGH = 10% x GROSS INCOME

CONTRIBUTION TO KEOUGH = 10% x $_____

CONTRIBUTION TO KEOUGH = .10 x $39,750

CONTRIBUTION TO KEOUGH = $_____

3. FIND ANGELA'S TAXABLE INCOME AFTER KEOUGH CONTRIBUTION

TAXABLE INCOME AFTER KEOUGH CONTRIBUTION = TAXABLE INCOME − CONTRIBUTION TO KEOUGH

TAXABLE INCOME AFTER KEOUGH CONTRIBUTION = $32,500 − $3975

TAXABLE INCOME AFTER KEOUGH CONTRIBUTION = $_____

# Planning for Retirement
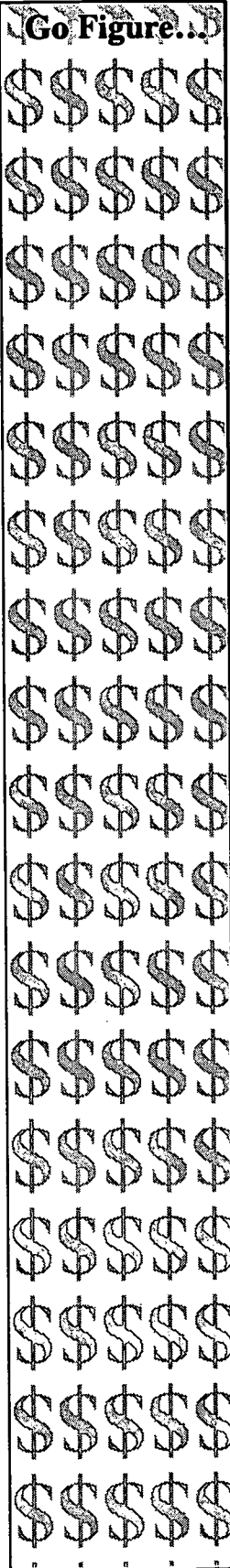
**4. FIND ANGELA'S FIT AFTER KEOUGH CONTRIBUTION**

FIT AFTER KEOUGH CONTRIBUTION = FIT RATE X TAXABLE INCOME

FIT AFTER KEOUGH CONTRIBUTION = 18% x $_____

FIT AFTER KEOUGH CONTRIBUTION = .18 x $28,525

FIT AFTER KEOUGH CONTRIBUTION = $_____


**5. FIND ANGELA'S TAX SAVINGS**

TAX SAVINGS = FIT BEFORE KEOUGH CONTRIBUTION – FIT AFTER KEOUGH CONTRIBUTION

TAX SAVINGS = $6500 – $5134.50

TAX SAVINGS = $_____


## Variable Annuity Funds

After discussing various savings plans for retirement, the agent began discussing investment plans. Angela was familiar with investing money in the stock market to make money. However, the risks and her many questions about the stock market made her feel uncomfortable. *When was the right time to invest? How much money would she have to invest? How much would she have to know about investing? How safe would investing in the stock market be?*

The agent did discuss a type of investment that was not perfect but may fit Angela's financial needs: a **variable annuity fund**, or *equity accumulation fund.* A *variable annuity fund* is a fund that permits the investor to buy a group of **common stocks** selected by an investment company. The idea of picking her own stocks sent shivers up and down Angela's spine. Variable
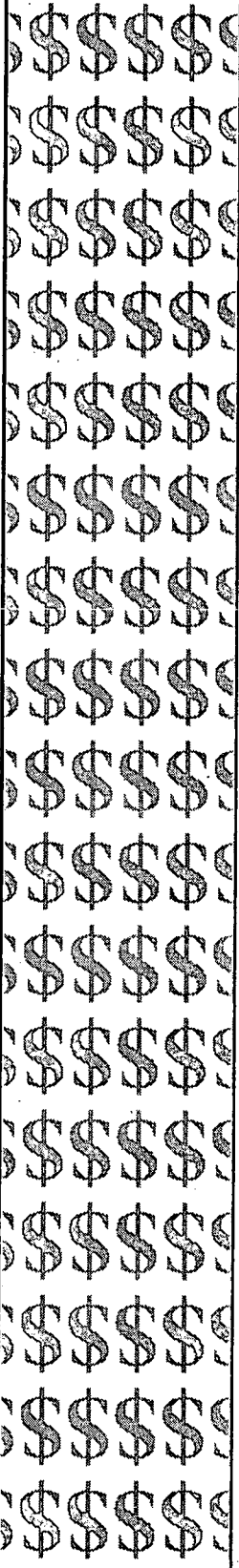
annuity funds would give Angela the advantages of owning common stock, without the burden of researching and selecting stocks to buy.

The objective of a variable annuity fund is primarily long-term capital appreciation. In other words, the fund increases the amount of money that is put in. Angela also could receive *dividends*, or returns on her stocks while she still owns them. Angela understood that she would be able to invest in 10 or more different stocks, or securities. She would also have the big advantage of full-time professional management. Managers would invest her money along with the money of thousands of other investors. Variable annuity funds would also allow her to sell her shares on short notice, regardless of the amount of money involved.

**Bernard Baruch, when asked how to choose the best time to invest, answered: "When you have the money."**

The agent continued to explain that *equity* funds still involve risk. The investor's chances of gain are excellent, but they are not assured. Ownership of equity funds offer other attractive features such as convenience, tax benefits, and regular dividends. He explained that any interested investor should talk to a *registered* representative. That representative would provide the investor with a special document about the fund and answer any questions about choosing a fund.

All of this sounded good to Angela, but she still had some questions about the best time to invest her money. Should she save a little more before she invested? How much should she start with? Should she wait until there was an upward trend in the stock market? Should she wait until the economy was out of the recession? Should she wait until a new president was elected?

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# Planning for Retirement

The agent seemed to be reading Angela's mind. He said, "The longer you wait to invest, the greater the chances are that you will do nothing. In the meantime, inflation continues to grow while your money does not grow. I would like to quote one of *the* most successful investors. Bernard Baruch, when asked how to choose the best time to invest, answered, "when you have the money."

Angela asked the agent if he could explain a little more about how inflation could affect investing and investments. The agent began by saying that more important than the *amount* of money you have is the amount of goods and services the money can buy. If the price of goods and services rises more quickly than your income, your money's buying power will decrease. This economic condition is called *inflation*.

The agent told her to imagine that she had retired after 45 years of working and had been able to save $1000 a year. At the end of 45 years, that level of savings should have compounded to $230,000. This would yield an annual retirement income of $13,800 without touching the principal. However, when inflation hit 6% in 1979, the buying power of the savings was reduced to the $45,000 that was put in. If inflation had continued unchecked at that pace, the end result might have been a savings that had the buying power of only $16,000 and a monthly yield with a buying power of only about $70.

After more questions about the best time to invest, the agent read this story.

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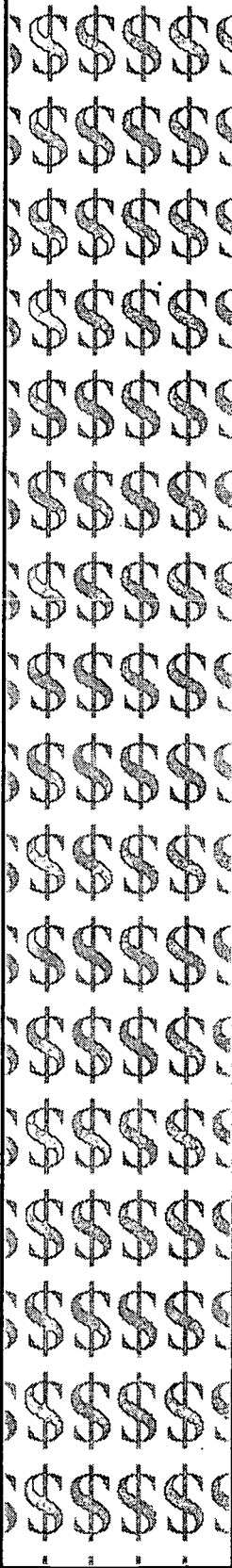
### The Incredible Investor
### (A Fable Based on the Facts)

As the fall of 1974 approached, the United States was gripped by despair and despondency. The newspapers were full of stories of misdeeds in high places. Even the President and Attorney General of the nation were accused of wrongdoing. The economy was deep in recession with the usual attendant high unemployment, and yet the problem of inflation persisted. Interest rates were high and the stock market was down. Confidence was at a low ebb.

John Intrepid, a teacher at Everybody's Regular School, mentioned casually to his colleagues lolling around the faculty lounge that he had been thinking it would be a good idea to begin a variable annuity account. There was a long silence during which each of them wondered if their ears had deceived them or whether John was, perhaps, too mentally confused to be allowed to educate the youth of that city. Lillian Loser observed that she had once thought the variable annuity to be a good deal. She had, in fact, purchased units of a variable annuity. The value of the units rose rapidly and surely toward $1.47. When the value began to go down, she stopped her monthly payments. Then she sadly added that she sold all her units when the stupid fund managers let the value get down to 71¢. She had cleverly salvaged part of her money before the fund could go broke and lose it all for her. Everyone shook their heads and agreed that it was a terrible time to invest.

John had felt a bit sheepish as he secretly made arrangements to put one half of his $200 per month tax-deferred deposit into the variable annuity at the beginning of the school year. Each month he received a statement showing how many units he purchased and the unit value for that day. The slip also showed the total number of units in the account—a total which grew automatically and easily by the month.

He noted grimly that the passbook savings account he had started at the same time, also gave him 100% accessibility but only paid 5½%. He had to scrape

up those dollars out of after-tax take-home pay, and he had paid income tax on the interest each year. His balance now was only $13,679.31, even though it compounded monthly.

John had noticed that his last variable annuity report showed a much higher unit value than when he started the program. When he called to check the current value of his account he found that it was $21,905.74. His friends found this difficult to believe and observed that John always had been a lucky dog. Paul Procrastinator said he was planning to start saving regularly when he could get around to it. Priscilla Fibettacappa said that if that variable annuity kept going up for a couple of years so she could be certain it was a good deal, she might be interested. The level of voices rose as everyone added their financial wisdom to the conversation. Everyone agreed on one point though. With inflation a continuing problem, turmoil in the Mid-East, and the specter of unemployment in 1984, it would be a terrible time to invest. They marveled at how someone as dumb as John could always luck out.

John Intrepid slipped out the door, shrugged his shoulders, and whistled softly as he strolled away, mentally counting his eggs in several baskets.

After hearing the story, Angela felt a little better about investing. However, she still thought of herself as an unsophisticated non-investor. She knew that large sums of money could be made in the stock market. She also knew that horrible losses could occur if the wrong moves are made. Her question to the agent was why get mixed up in investing?

The agent's answer was another quote from the great investor Bernard Baruch—"You buy securities because you have reason to believe they will increase in value over the years." The percentage of gain that might be

**"You buy securities because you have reason to believe they will increase in value over the years."**

—*Bernard Baruch*

**Go Figure...**

achieved cannot be accurately predicted. Past history demonstrates that the trend in the stock market is clearly upward.

The session on investments ended on a positive note. Angela and quite a few others were ready to invest in their future.

*Time for some practice!*

# Planning for Retirement

# Retirement Benefits

*Use the information from your reading to solve the problems below. Write the correct answer on each line. Round your answers to the nearest cent.*

FINAL AVERAGE SALARY = SUM OF THE LAST FIVE YEARS + 5

ANNUAL PENSION = FINAL AVERAGE SALARY x YEARS OF SERVICE x RATE OF BENEFIT

FIT BEFORE KEOUGH CONTRIBUTION = FIT RATE x TAXABLE INCOME

CONTRIBUTION TO KEOUGH = 10% OF GROSS INCOME

TAXABLE INCOME AFTER KEOUGH CONTRIBUTION = TAXABLE INCOME − CONTRIBUTION TO KEOUGH

FIT AFTER KEOUGH CONTRIBUTION = FIT RATE x TAXABLE INCOME AFTER KEOUGH CONTRIBUTION

TAX SAVINGS = FIT BEFORE KEOUGH CONTRIBUTION − FIT AFTER KEOUGH CONTRIBUTION

1. Randy was trying to determine his retirement benefits. He plans to work for 25 years or until he is 65 years old. He figures that at the present rate his last five years should be as follows: $56,000; $58,000; $60,000; $62,000; and $64,000. The company's rate of benefit is 2.5%. What will his annual pension be?

Randy's annual pension _____

10.01

2.  Randy decided he needed additional income to maintain his standard of living. He determined his gross income would be $38,500. His taxable income after business expenses would be $28,900. The FIT rate is 20% of his taxable income. Randy contributed 10% of his gross income to his Keough account. This reduced his income tax to 18% of his taxable income. How much did he save in federal income tax?

    FIT before Keough _____

    Contribution to Keough _____

    Taxable Income _____

    FIT after Keough _____

    Randy's tax savings _____

3.  If you were deciding to make investments as way of earning additional retirement benefits, how much would you invest? In what company would you invest your money? Why? Explain your answer.

    How much? _____

    What company? _____

Why? _____

_____

_____

_____

_____

# Appendices

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