DOCUMENT RESUME

ED 117 574

CE 006 291

AUTHOR TITLE.

Nuschler, Alexandra; And Others Business Mathematics. Mathematics Curriculum Guide

(Career Oriented).

#INSTITUTION REPORT NO PUB DATE

Louisiana State Dept. of Education, Baton Rouge.

Bull-1279; -VT-102-470

May 74

NOTE

42p.; For related documents, see CE 006 282-290

EDRS PRICE DESCRIPTORS MF-\$Q.83 HC-\$2.06 Plus Postage

Behavioral Objectives; *Business Subjects; *Career Education; *Curriculum Guides; Learning Activities; Mathematics Curriculum; *Practical Mathematics;

*Secondary Education

IDENTIFIERS

Louisiana

ABSTRACT

The curriculum guide correlates concepts in business mathematics with career-oriented concepts and activities. The curriculum outline format gives the concepts to be taught, matched with related career-oriented performance objectives, concepts, and suggested instructional activities in facing page layouts. The outline is divided into the major sections of fundamental arithmetic, consumer mathematics, retailing, mathematics of finance and investment, taxes and insurance, and business graphs and records. (NJ)

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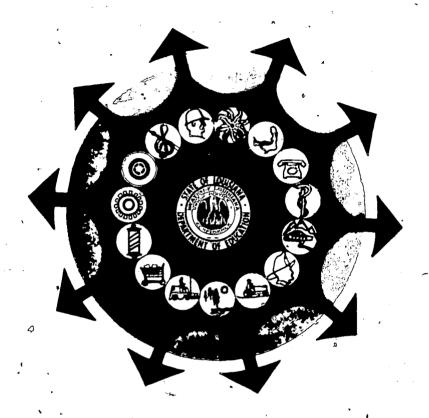
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MATHEMATICS CURRICULUM GUIDE CAREER ORIENTED

BUSINESS MATHEMATICS

BULLETIN NO. 1279

Louisiana State Department of Education Louis J. Michot, Superintendent 1974

US DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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MATHEMATICS CURRICULUM GUIDE

(CAREER ORIENTED)

BUSINESS MATHEMATICS

LOUISIANA STATE DEPARTMENT OF EDUCATION

Louis J. Michot

State Superintendent

May 1974

V.T 11247

ACKNOWLEDGEMENTS

Appreciation is expressed to the original writing team which worked so diligently in developing the Materials and ideas included in the guideline.

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For their constructive suggestions and additions in this revised edition, we give special thanks and acknowledgement to this year's team.

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Finally, we express our gratitude to Superintendent Louis J. Michot, who has been the spearhead in promoting the concept of career education for all, and to the Louisiana Legislature which recognized the need for such a programmand saw that funds were made available to carry on this worthwhile endeavor.

PREFACE

The first working draft of the Mathematics Curriculum Guide Secondary Level was distributed for field testing for the 1973-74 academic year. Feedback indicated that the materials were appropriate for the purposes as stated in the original preface.

The materials presented herein have been changed from the original only in that the mathematical language has been made as uniform as possible for clarity and to conform to the texts adopted by the State of Louisiana. Additional career learning activities have been introduced.

The format has been revised so that it should be easier to correlate the curriculum outlines and performance objectives with the related career oriented concepts and learning activities.

The reader who is seeing the materials for the first time can be assured that the career approach of these guidelines in no way weakens the present program. As in all good educational procedures, materials are included so that all levels may be served. In addition to the ambitious minimum recommendations the guidelines contain ample materials for those students who need to be challenged.

Mathematics is embedded in all of the disciplines and makes a solid base for experiences in career education. This is borne out by the numerous references and career activities from the spectrum of life.

The student is led in a systematic development that is designed to provide for continuous progress. Dignity of the person was always foremost in devising and revising the guidelines. The goals were set to give maximum development of the individual through all types of educational experiences.

Finally, our schools will always have a basic curriculum. The methods of instruction will be constantly changing, and the counselors will continue to lend their influence in guiding the pupil. The career education goals which are interwoven with the traditional will help make more productive citizens of Louisiana's most important assets, its children.



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Business Graphs

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BUSINESS MATHEMATICS

ERIC Full Text Provided by ERIC

PERFORMANCE OBJECTIVES

I. 🚙 Fundamental Arithmetic

·

Basic Skills

- Addition of multidigit numbers in columns
- 2. Addition using combinations of 10-
- 3. Checking addition
- 4. Addition
 (horizontal)
- Subtraction
- 6. Checking subtraction
- 7. Subtraction (horizontal)
- 8. Multiplication
- Checking multiplication (interchanging)
- 10. Checking
 multiplication
 (casting-out-nines).

I. Fundamental Arithmetic

- A. To demonstrate proficiency in basic arithmetic skills, the student should be able to:
 - 1. Add multi-digit numbers (listed in a column).
 - 2. Increase his speed in columnar addition by grouping in combinations of 10.
 - Check addition by the reverse-order method.
 - Add in horizontal form (without rewriting in columnar form).
 - 5. Subtract one multidigit number from another.
 - 6. Check subtraction by addition.
 - 7. Subtract in horizontal form (without rewriting in columnar form).
 - 8. Compute the product of two multi-digit numbers.
 - Check the product of two numbers by interchanging the factors.
 - 10. Check the product of two numbers by the casting-out-nines methods and explain how this method can fail.

RELATED CAREER ORIENTED LEARNING ACTIVITIES

Career Concept :

A person may be suited for several different careers.

Performance Objectives

A. A truck driver who delivers goods long distances, should be able to determine the length of time of a trip and the number of gallons of gasoline needed.

A peach farmer should be able to estimate the size of his crop.

An electrical appliance dealer should be able to compute the total cost of merchandise bought.

A. A truck driver has to drive from New York to Chicago, a distance of 840 miles. If he averages 40 m.p.h., how long will it take to make the trip if he must rest 6 hours after every 12. hours of driving time? How many gallons of gasoline will be required if his truck averages 14 miles per gallon?

A peach farmer has 39 rows of peach trees and each row contains 26 trees. He expects an average of 29 bushels of peaches from each tree. How many bushels of peaches does the farmer expect to harvest?

An electrical appliance dealer during the last month purchased 15 refrigerators at \$298—each, 36 electric irons at \$13 each, 20 washing machines at \$195 each, 12 clothes dryers at \$179 each, 27 television sets at \$207 each and 48 radios at \$34 each. What was the total cost of the merchandise if the sales tax is 5%.



PERFORMANCE OBJECTIVES

- 11. Application of multiplication
- 12. Division
- 13. Checking division (multiplication)
- 14. Checking division (cast out nines)
- 15. Computing averages
- B. Fractions
 - 1. Reading a decimal fraction
 - 2. Writing a decimal fraction
 - 3. Expressing a fraction as a quotient

- 11. Apply multiplication to compute the extension when given the number of items sold and price per item.
- 12. Divide one multi-digit number by another with accuracy of at least 75% on a timed test.
- 13. Check division by computing the product of the divisor and the quotient and adding the remainder to obtain the dividend.
- 14. Check division by the casting-out-nines method.
- 15. Compute the average of a given set of numbers.
- B. To demonstrate a basic understanding of and proficiency in the use of fractions, the student should be able to:
 - 1. Read correctly any decimal fraction.
 - 2. Write any fraction in decimal notation.
 - 3. Demonstrate his knowledge of expressing a fraction as an indicated quotient by:
 - a. Changing a common fraction or mixed number to a decimal fraction.
 - b. Changing a decimal
 fraction to a common fraction or mixed
 number.

RELATED CAREER ORIENTED LEARNING ACTIVITIES

B. A heating equipment installer should be able to add fractions to determine the total length of pipe that is necessary to install a heating system.

A laundry operator uses decimals to compute the laundry bill of a customer.

B. A heating equipment installer needs 4 pieces of pipe to install an oil burner. The lengths required are 4 11/16 inches, 7 5/8 inches, 3 1/2 inches, and 9 inches. Determine the total length of pipe needed disregarding waste? What is the price of the pipe needed disregarding waste? What is the price of the pipe if it is \$2.00 per linear foot?

The rates of a local laundry are \$1.35 for the first 12 pieces and \$.09 for each additional piece. If the laundry charged \$2.61, how many pieces were laundered?

- PERFORMANCE OBJECTIVES:
- 4. Reducing a fraction
- Equivalent fractions
- Sum of mixed numbers (columns)
- 7. Sum of mixed numbers (row)
- 8. Difference of two mixed numbers
- Product of a mixed number and a whole number
- 10. Product of two mixed numbers
- 11. Quotient of two mixed numbers
- 12. Aliquot parts
- 13. Multiples of aliquot parts
- C. Percentage

- 4. Reduce a given fraction to lowest terms.
- 5. Change a given fraction to an equivalent fraction with a specified denominator.
- 6. Compute the sum of a column of mixed numbers.
- Compute the sum of a row of mixed numbers.
- 8: Subtract one mixed number from another.
- 9. Compute the product of a mixed number and a whole number.
- Compute the product of two mixed numbers.
- Divide one mixed number by another.
- 12. Name the most commonly used aliquot parts of \$1 and determine what part of a dollar they are.
- 13. Apply multiples of aliquot parts of \$1 to business transactions.
- C. To develop an understanding of and proficiency in the use of percentage, the student should be able to:

RELATED CAREER ORIENTED LEARNING CTIVITIES

C. An electrical appliance retailer should be able to use percent to determine the selling price of an appliance.

C. An electrical appliance retailer bought a refrigerator for \$175 and marked it to sell for a profit of 40% of the cost. He sold it for 15% less than the marked price. Determine the selling price and the profit.

PERFORMANCE OBJECTIVES

O

- 1. Expressing a percent as a common fraction
- 2. Expressing percent as a decimal
- Expressing a fraction as a percent
- 4. Expressing a whole number as a percent
- Determining percentage
- Determining percent (rate)
- 7. Determining base
- 8. Determining percentage when the rate is less than 1%.
- 9. Determining percentage when the rate is greater than 100%
- 10. Computing the percent of increase
- Computing the percent of decrease

- Express a given percent as a common fraction.
- 2. Express a given percent as a decimal fraction.
- 3. Express any fraction (common or decimal) as a percent.
- 4. Express any whole number as a percent.
- 5. Determine percentage when given rate and base.
- 6. Determine what percent one number is of another.
- Determine base when rate and percentage are given. Find a number when a given percent of that is known.
- 8. Compute percentage when the rate is less than 1%.
- Compute percentage when the rate is greater than 100%.
- 10. Subtract one number from another and determine what percent of the subtrahend the difference is (percent of increase).
- 11. Subtract one number from another and determine what percent of the minuend the difference is (percent of decrease).

RELATED CAREER ORIENTED LEARNING ACTIVITIES

An insurance agent, should be able to use percent to determine the amount a home owner would receive if his insured house is destroyed by fire.

Many of the jobs with the Federal government require that one pass the Federal Service Entrance Examination (FSEE)! This test is administered periodically during a year, usually at a post office. A federal service testing director should be able to 1 compute the percent . of the applicants who actually took the test and the percent of testees who passed it.

An insurance agent sells fire insurance on a house for 80% of its assessed value. If the assessed value is \$25,000, how much would the owner receive in the event the house was destroyed by fire?

Each year the federal government hires many people who have made passing scores on the FSEE. There are usually more applicants than testees. Since it is a fairly difficult test, many who take it do not pass it. The director of testing keeps records of the number of applicants who take the test and the number of testees who pass it. During the year 1973, a total of 2,476 applied to take the "test. Out of this number only 1,988 took the test and 1,142 passed. Compute the percent of applicants who took the test, and compute the percent of testees who passed.

PERFORMANCE OBJECTIVĖS

12. Applying percent to business applications

12. Apply percent to business applications such as commissions.

RELATED CAREER ORIENTED'
LEARNING ACTIVITIES



PERFORMANCE OBJECTIVES

II. Consumer Mathematics

II. Consumer Mathematics

A. Income

- 1. Computing pay
- Computing overtime

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- 3. Computing gross salary
- 4. Determining social security tax *
- 5. Using withholding tax tables
- 6. Computing net salary
- 7. Computing gross and net wages
- B. Expenditures
 - Solving problems involving quantity purchasing
 - Solving problems
 pertaining to
 household and
 living expenses

- A. To demonstrate a basic understanding of consumer income, the student should be able to:
 - Compute pay for a 40hour week or shorter week.
 - Compute overtime pay.
 - 3. Compute gross salary.
 - 4. Determine the social security tax by:
 - a. Using tables
 - ත්. Computing it at the current rate.
 - 5. Use the withholding tax tables.
 - Compute the net earnings or net salary.
 - Compute gross wages and net wages based on piecework.
- B. To demonstrate a basic understanding of consumer expenditure, the student should be able to:
 - Solve problems involving quantity purchasing.
 - Solve problems pertaining to household and living expenses.

RELATED CARÈER ORIENTED LEARNING ACTIVITIES

II. Career Concept

Individuals adapt to world changes and environment.

Performance Objectives

- A. A payroll clerk should be able to compute, federal withholding tax, social security tax, and state income tax to determine an employee's net salary.
- A. A factory employee has worked 40 hours at \$3.20 per hour. He is married and has two dependents. Using the current tax withholding tables for federal, state, and social security taxes, compute the employees net salary.

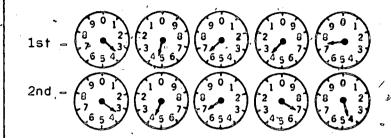
- B. A meter reader for an electric company should be able to read an electricity meter. This reading is then used by an office clerk to compute a bill.
- B. Read the two electricity meters below and compute the number of kilowatt hours used between the 1st reading and 2nd reading.

- 3. Checking computations (bills)
- 4. Filling out sales slips, invoice, etc
- 5. Solving budget problems
- Solving problems involving ownership of an automobile
- 7. Solving problemsinvolving buying,leasing or rentinga house
- 8. Compute the food bill
- 9. Reading meters
- 10. Computing utility bills
- C. Credit
 - 1. Computing installment charge
 - Computing interest and effective annual rate on an installment purchase

PERFORMANCE OBJECTIVES

- 3. Check the computation on household bills.
- 4. Fill out an everyday, business form such as a sales slip, invoice, etc.
- 5. Solve a budget problem (for example, prepare a complete budget for a planned vacation).
- 6. Solve a typical problem involving the ownership of an automobile (for example, compute the mileage in miles per gallon).
- 7. Solve problems involving the buying, leasing or renting of a house.
- 8. Compute the family food bill.
- 9. Read gas, water, and electrical meters.
- Compute gas, water, and electric meters.
- C. To demonstrate a basic understanding of consumer credit, the student should be able to:
 - Compute an installment charge.
 - 2. Compute interest and the effective annual interest rate on an installment purchase (e.g., on an automobile purchase).

RELATED CAREER ORIENTED LEARNING ACTIVITIES



- C. An automobile dealer should be able to compute the finance charge, monthly payment and effective annual interest rate on a new car.
- C. A new car can be purchased for \$3,485 with 10% down and the balanced financed at 8% for three years. Compute the finance charge, the monthly charge, the monthly payment and the effective annual rate of interest.

PERFORMANCE OBJECTIVES

- Computing interest and effective an annual rate on a small loan
- 4. Determining best plan for install-ment purchases
- 5. Determining most economical loan

##D. Extension

- 1. Federal Minimum Wage Law
- 2. Social Security benefits

- 3. Compute the interest and the effective annual interest rate on a small loan.
- Determine the most
 economical installment
 purchase plan among
 several plans.
- 5. Determine the most economical source for a loan; e.g., bank, loan company, or credit union.
- ##D. To extend the above concepts and skills, the student should be able to:
 - 1. Discuss the Pederal
 Minimum Wage Law and
 its effect on business
 and labor.
 - 2. Discuss the following aspects of the Social Security Act:
 - a. Income and age
 - b. Retirement benefits
 - c. Survivors benefits
 - l. Disability benefits
 - e. Unemployment compensation

RELATED ÇAREER ORIENTED LEARNING ACTIVITIES

##D. A mobile home factory worker should be able to compute his social security benefits.

##D. Fred Mack worked for a mibile home factory until retirement at 65. His average monthly salary was \$400. His wife was also 65 when he retired. Using the current social security benefit table, compute the amount they received each month.

#

PERFORMANCE OBJECTIVES

III. Retailing

III. Retailing

- A. Trade and Cash Discounts
 - i. Computing trade and cash discounts
 - Using a series of discounts
 - 3. Using a discount table
 - 4. Computing cash discount and net price
- B. Selling at Retail
 - Computing discounts
 - 2. Computing
 discount rates
 - Computing markup and percent of markup
 - 4. Computing retail price when the percent of markup is based on the cost

- A. To demonstrate a basic understanding of trade and cash discounts, thê student should be able to:
 - Compute the trade and cash discounts and the net prices in business purchases.
 - 2. Use a series of discounts to compute cost.
 - 3. Use a discount table.
 - Compute cash discount and net price.
- B. To demonstrate a basic understanding of retail selling, each student should be able to:
 - Compute consumer discounts on a purchase.
 - 2. Compute discount rates.
 - Compute Markup and percent of markup.
 - 4. Compute the retail price of an article when the percent of markup is based on the cost and the rate and cost are known.

RELATED CAREER ORIENTED LEARNING ACTIVITIES

III. Career Concept

Individuals seek careers for varied reasons.

Performance Objectives

- A. A piano manufacturer should be able to apply the concept of cash and trade discounts to computing the net cash price.
- A. A piano manufacturer lists his Model XO-2 piano at \$900 less 25% trade discount, with terms 2/10, n/30. If the piano is purchased and invoice is paid within cost discount period, find the net cash price.

B. A publishing firm should be able to apply the concepts of markup in determining the price of textbooks.

A pet shop owner should be able to apply the concept of markup in determining the price to sell pets. B. A textbook costing \$3.154has a marked price of \$4.80. It is sold less a teacher's discount of 25%. Find the markup and the percent of markup on the retail.

Mr. Hall has found that to make a profit on pets, he must sell them for 50% more than they cost him. The cost of a canary trained to sing is \$7.50. He marks the selling price 50% more than the cost. What was the markup for the canary? At what price did he sell the canary?



PERFORMANCE OBJECTIVES

5. Computing the retail price when the percent of markup is based on retail



- Computing cost when percent of markup is based on selling price
- 5. Compute the retail price of an article when the percent of markup is based on the retail price and the rate and cost are known.
- 6. Compute the cost of an article when the percent of markup is based on the retail price and the rate and selling price are known.

RELATED CAREER ORIENTED LEARNING ACTIVITIES

PERFORMANCE OBJECTIVES

- IV. Mathematics of Finance and Investment
- IV. Mathematics of Finance and Investment



A. Interest

-00

- 1. Computing exact
- Computing banker's interest
- 3. Using a time table
- 4. Computing interest using the interest table
- Compounding interest
- 6. Using compound interest table
- 7. Computing future value of deposited money on a projected date
- B. Stocks and Bonds

- A. To demonstrate a basic understanding of interest, the student should be able to:
 - Compute exact interest given time and amount.
 - Compute banker's interest, given time and amount.
 - Determine the time lapse between 2 dates by use of a time table or by mental computation.
 - Compute interest by the use of an interest table.
 - Compound interest semiannually and quarterly.
 - Use compound interest tables.
 - 7. Compute the future value of deposited money by use of the compound interest tables.
- B. To demonstrate a basic understanding of stocks and bonds, the student should be able to:

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RELATED GAREER ORIENTED LEARNING ACTIVITIES

IV. Career Concept

Individual careers may change as individuals change throughout life.

Performance Objectives

- A. A concert pianist should be able to compute interest to determine the most economical loan.
- A. A concert pianist buys a "Baby Grand" valued at \$1,600 for which he must pay cash. If he waits 30 days to make payment, there is a penalty charge of 2% of the invoice total. Since he does not have the cash, should he pay immediately with money that can be borrowed from the bank for 30 days at an interest rate of 6% or should he wait the 30 days and pay the penalty charge?

- B. A stock broker should be able to compute commissions on stocks and bonds he sells.
- B. A stock broker sells 38 shares of stock for a customer at 24 3/4 and charges a fee of \$5.00 plus 5% on the cost of the stock. Determine the broker's commission.

PERFORMANCE OBJECTIVES

- Computing dividends on stocks
- 2. Computing interest payment on bonds
- Interpreting information in a newspaper concerning stocks and bonds
- Computing brokerage fee
- C. Promissory Notes and Drafts
 - Distinguishing between a promissory note and a draft
 - 2. Finding maturity date of a promissory note
 - 3. Computing proceeds of a non-interest bearing note.
 - 4. Computing proceeds of an interest-bearing note.
 - Computing collection fee on a draft
 - Determine proceeds of a time draft

- Compute the dividend .
 due a stockholder, given
 the rate of dividend and
 number of shares held.
- 2. Compute the interest payment on a bond, given the rate and amount.
- Read and understand a newspaper report of stocks and bonds quotations.
- 4. Compute the brokerage fee on a stock or bond purchase.
- C. To demonstrate a basic understanding of promissory notes and drafts, the student should be able to:
 - Tell how a promissory note and a draft can be alike and how they can differ.
 - 2. Determine the maturity date of a promissory note.
 - Compute the proceeds of a non-interest bearing note.
 - 4. Compute the proceeds of an interest-bearing note.
 - 5. Compute the collection fee on a draft.
 - 6. Determine the proceeds of a time draft.



RELATED CAREER ORIENTED LEARNING ACTIVITIES

- C. A banker should be able to compute the date of maturity and interest charge on a promissory note.
- C. A 90 day, 6% interest-bearing note of \$2,476 was made on September 10. Find the maturity date and the interest charge.

PERFORMANCE OBJECTIVES

##D. Extension

- Tax on stocks and bonds
- 2. Return on stocks and bonds
- Interest (banker's method)
- 4. Compound interest
- Amortization of mortgage

- ##D. To extend the above concepts and skills, the student should be able to:
 - Compute the tax on a sale of stocks and bonds.
 - 2. Compute the rate of return on money stocks and invested in bonds.
 - 3. Compute interest using the 60-day banker's method.
 - 4. Compute compound interest.
 - Determine an amortization schedule for a mortgage.

RELATED CAREER GRIENTED LEARNING ACTIVITIES

##D. A mutual fund director should be able to compute profit on stocks and bonds.

##D. Mr. Thorton, a mutual fund director, bought seven \$1,000 bonds at 96 1/4. A month later he sold them at 100 3/4. If his broker charged him \$5 per bond each time, how much profit did he make?



PERFORMANCE OBJECTIVES

- V. Taxes and Insurance
- V. Taxes and Insurance

- A. Income Tax
 - 1. Completing W-4 forms
 - 2. Interpreting W-2 forms
 - 3. Using income tax tables
 - 4. Filling out basic 1040 income tax forms
 - B. Insurance
 - Computing fire insurance premiums
 - Computing automobile insurance premiums
 - 3. Determining indemnities
 - 4. Computing life insurance premiums

- A. To demonstrate a basic understanding of income tax, the student should be able to:
 - 1. Complete a W-4 form.
 - Interpret a W-2 form.
 - 3. Use income tax tables in current U. S. Income Tax booklets to compute tax liability.
 - (4. Fill out the basic 1040 income tax form given a realistic set of data.
- B. To demonstrate a basic understanding of insurance, the student should be able to:
 - Compute fire insurance premiums given the value of the property and the zone rate.
 - Compute collision, comprehensive, and liability premiums, given essential data.
 - 3. Determine indemnities of insurance companies in various accidents.
 - 4. Compute insurance premiums on term, limited payment, and endownment life insurance policies.



RELATED CAREER ORIENTED LEARNING ACTIVITIES

V. Career Concept

Individuals have different abilities, interests, needs and values.

Performance Objectives

- A. An Internal Revenue auditor should be able to check the accuracy of a tax return and whether it contains fraudulent information.
- A. Have students complete Form 1040 income tax returns. Exchange returns, and check for arithmetical accuracy.

- B. A barber should be able to compute the premiums for fire insurance on his barber shop and the amount of money he will receive if it is destroyed by fire.
- B. A barber insured his \$8,400 barber-shop building for 75% of its value. He also insured the \$1,500 contents for 70% of their value. The yearly rate on the building was \$.12 per \$100 and \$.15 per \$100 on the contents. What was his annual premium? How much would the barber be paid by the insurance company if his building and its contents were totally destroyed by fire?

PERFORMANCE OBJECTIVES

- C. Property and Sales tax
 - 1. Computing property tax
 - Changing rate of taxation to an equivalent rate
 - 3. Computing state and local taxes
 - 4. Computing federal excise tax
- ##D. Extension
 - 1. Itemized deduction forms
 - 2. Using tax formula
 - Best type of insurance

- 4. F.I.C.A.
- Limit on social security payments

C. To demonstrate a basic understanding of property and sales taxes, the student should be able to:

1 500

- Compute property tax, given the valuation of the property and the zone rate.
- Change from one rate of taxation to an equivalent rate (e.g., 1% to 10 mills)
- Compute state and local sales taxes.
- 4. Compute federal excise tax.
- ##D. To extend the above concepts and skills, the student should be able to:
 - Fill out itemized deduction forms.
 - 2. Compute income taxes from the state tax schedule.
 - 3. Determine a suitable type of life insurance (term, ordinary life, 20-year endowment, etc.) for a prospective insuree by considering such factors as age, income, and family size.
 - 4. Discuss the Federal
 Insurance Contributions
 Act and state the
 current rate of deduction.
 - 5. Determine the week in which the social security tax should cease to be deducted when given the regular weekly salary of a person.

RELATED CAREER ORIENTED LEARNING ACTIVITIES

A community with an assessed

required \$50,000 for taxes.

valuation of \$2,500,000

C.

C. A tax assessor should be able to compute the tax rate for a given community:

A tire salesman should be able to compute sales taxes and to use excise tax to determine the total price of a set of tires.

What should its tax rate be?
Express the rate as dollars per \$100.

The list price of Goodstone tires is \$44.59 each. Excise tax is \$2.38 per tire. State and local sales tax is 5%.

How much does a set of four -

tires cost?

##D. Given the weekly salary of an employee, a payroll clerk should be able to determine how many weeks social security tax deductions should be made.

A large number of the work force of this country is insured under the Federal Insurance Contributions Act (F.I.C.A.). Each worker should be familiar with the benefits under this act.

##D. A police chief's wages are \$250 per week. Using the current social security deduction rate, determine how many weeks social security tax deductions should be made.

Have each student write a report about the Federal Insurance Contributions Act. Invite a social security official to discuss this act with the students.



PERFORMANCE OBJECTIVES

- VI. Business Graphs and Records
- VI. Business Graphs and Records

- A. Business Graphs
 - 1. Identifying,
 interpreting, and
 constructing
 business graphs
 - a. Broken-line
 - b. Bar line
 - c. Smooth-line
 - d. Circular
 - e. Rectangular
 - f. Pictograph
 - 2. Central tendencies
 - 3. Computing mean, median, and mode
- B. Business Records
 - 1. Reconciling a bank statement
 - 2. Keeping a petty cash book
 - Preparing a statement of income and expenditures
 - 4. Balance sheet

- A. To demonstrate a basic understanding of business graphs, the student should be able to:
 - 1. Identify, interpret, and construct the following types of business graphs:
 - a. Broken-line
 - b. Bar line
 - c. Smooth-line
 - d. Circular
 - e. Rectangular
 - f. Pictograph
 - 2. Define mean, median, and mode.
 - 3. Compute an arithmetic mean, median, and mode.
- B.' To develop a basic understanding of business records, the student should be able to:
 - 1. Reconcile a bank statement.
 - 2. Keep a petty cash book.
 - Prepare a statement of income and expenditures.
 - 4. Prepare a balance sheet.

RELATED CAREER ORIENTED LEARNING ACRIVITIES

VI. Career Concept

Individuals careers may change as individuals change throughout life.

Performance Objectives

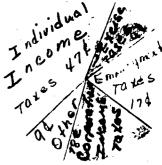
A. A statistician should be able to construct a graph illustrating the number of accidental deaths during a given year.

The budget statistician for the United States government uses a circle graph to present the income of the government. From this a consumer can compute the amount of money that comes from each source if he knows the total income.

B. The manager of a service station should be able to reconcile a bank statement

A. Draw a vertical bar graph picturing the number of accidental deaths by causes during 1972: motor vehicles 32,300; falls 26,650; burns 8,350; drownings 750; railroads 4,450; firearms 2,500; and poisons and gases 4,000.

Using the graph below, determine how much money comes from each source if the total income is 93 billion dollars.



B. On July 1, Henry James' checkbook balance was \$343.43. The bank statement he received on that date showed a balance of \$331.15. Checks outstanding were No. 37 for \$3.50, No. 41 for \$7.85 and No. 43 for \$13.23. A deposit of \$35, mailed on June 30 had been received by the bank too late to be entered on the statement. Reconcile Henry James' bank statement.

-PERFORMANCE OBJECTIVES



RELATED CAREER ORIENTED LEARNING ACTIVITIES

A businessman should be able to prepare a balance sheet to determine the net worth of his business.

Using the form below prepare from the following facts a balance sheet as of December 31, showing the capital of James Harris. Assets: Cash, \$4,382.59; account's receivable, \$2,857.16; notes receivable, \$875; inventory of merchandise, \$15,200; furniture and fixtures, \$3,425; delivery trucks, \$5,200. Liabilities: accounts payable, \$2,195.63; notes payable, \$1,450.

JAMES HARRIS

Balance Sheet, December 31, 19_

Assets
Cash \$
Accounts Receivable
Notes Receivable
Inventory of Merchandise
Furniture and Fixtures
Delivery Trucks

Liabilities
Accounts Payable \$
Notes Payable
__Total Liabilities

James Harris, Capital

Total Assets ____

Total Liabilities and Capital

Net Worth = Assets - Liabilities.

