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ABSTRACT

The Single Parent/Displaced Homemaker Program at Gulf Coast Community College (Panama City, Florida) targeted a population of women who generally had a high school diploma and needed moral support, direction, and financial assistance in returning to college to pursue higher-level vocational programs. (Because citizens in the rural panhandle area served by the college are highly conservative, it is difficult to encourage women to go into nontraditional occupations, and almost impossible without assistance.) The project received approximately \$37,000 to attempt to recruit 60-80 potential students and to place 70 percent of them in programs or courses that would eventually lead to employment for at least 29. The project far exceeded expectations in that 384 women were recruited. Of those, 158 enrolled in a "Returning Woman" course or a vocational college program. Only 13 women received financial assistance. Since all programs are one-year certificate or two-year degree, no students had completed a training program for job placement at the time this report was written. Close linkages were developed with offices on campus such as student development, financial aid, Job Training Partnership Act, public relations, and lifelong learning. Networking with community agencies resulted in referrals and recruitment of advisory committee members. During the next year, emphasis will be placed on coordination of individual and group counseling with student development and community agencies, coordination of noncredit classes with the office of lifelong learning, and coordination of financial assistance with the Job Training Partnership Act. (Attachments to the 14-page project report include project publicity, brochures, the module "Math for Returning Women," correspondence, and forms.) (Author/KC)

ED287975

Final Report

Project No. DVE 032-15170-7-2D04

From October 1986 to June 30, 1987

Special Programs
for
Single Parent/Displaced Homemakers

GULF COAST COMMUNITY COLLEGE
5230 WEST HIGHWAY 98
PANAMA CITY, FLORIDA 32401

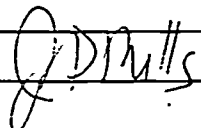
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Advisory Board Members	Gulf Coast Community College
Support Staff	Lifelong Learning

ABSTRACT

The Single Parent/Displaced Homemaker Program at Gulf Coast Community College targeted a population of women who generally had a high school diploma and needed moral support, direction and financial assistance in returning to college to pursue level vocational programs. A project coordinator was hired in October, 1986 to implement grant objectives in 8-1/2 months.

Citizens in the rural panhandle area served by Gulf Coast Community College hold highly conservative, traditional beliefs relative to women's roles and occupations. It is also an area of minimum wage jobs and few high paying jobs even in technical areas. For these reasons, it is difficult to encourage women to go into non-traditional occupations and almost impossible without tuition, book or child care assistance.

The original grant of \$25,500 did not include any financial assistance. A supplement of \$11,600 was received in March that included \$2,000 for tuition and child care assistance. The project goal was to recruit 60-80 potential students and place 70% in programs or courses that would eventually lead to employment for at least 29. The project far exceeded expectations in that 384 women were "recruited." Of those, 158 enrolled in a pre-enrollment, "Returning Woman" course or vocational college program. The statistic is significant in that financial assistance was only given to .03% or 13 women. The minimum recruitment goal was exceeded by 324 women or 640% and minimum enrollment projections were exceeded by 116 women or 376%! Since all programs are one-year certificate or two year degree, no student has completed a training program for job placement. 57 applications have been received for anticipated financial assistance in Fall, 1987.

Close linkages were developed with offices on campus such as student development, financial aid, JTPA, public relations and lifelong learning. Networking with community agencies has resulted in referrals and advisory committee members.

A computer, software and books were purchased to assist women in career choices and personal development.

During the coming year, emphasis will be placed on coordination of individual and group counseling with student development and community agencies, coordination of non-credit classes with the office of lifelong learning and coordination of financial assistance with JTPA. It is hoped that increased funding will be available to women so they may share the future in traditional and non-traditional vocational programs at Gulf Coast Community College.

SPECIAL PROGRAMS FOR SINGLE PARENTS/DISPLACED HOMEMAKERS

INTRODUCTION:

This proposal was designed to assist the single parent or displaced homemakers by providing support services including counseling, seminars, short personal growth and skill building courses, and in limited amount, tuition and/or child care assistance for women enrolled in vocational programs at Gulf Coast Community College.

Gulf Coast Community College is located in Panama City, Florida and serves Bay, Gulf and Franklin counties. The population of the college service area varies from one characterized as "very rural" to one characterized as "industrial." The service area is largely traditional and highly conservative in belief. 51% of the persons in the college service area are female. 41.7% of the adult women in the college's service area work outside the home. Job Services of Florida statistics show that in Bay County, the largest of the three counties served, the average salary of females who are heads of families is \$9,542. According to the information gathered on the data sheets for single parent/displaced homemakers, the average income for women who have made contact with the College is \$8,200, significantly lower than the published figure for all women heads of households. It is evident that this population needs to have financial assistance for increased job training skills to provide for their families.

In addition, because of an unemployment rate of 12.2% and the increase in single parent households, many women who had not planned to work outside the home find themselves looking for jobs. Bay County has a highly transient population, two military bases and a large tourist and senior citizen population. For these reasons, many women whose husbands are retired or disabled find themselves in need of marketable educational and employment skills.

Gulf Coast is a two-year open door institution that offers Associate in Arts Degrees for transfer to 4-year institutions and Associate in Science and certificate programs which are designed to train students for immediate employment. The enrollment is approximately 5,000 students per semester and the average age per student is 29.

According to the Florida Job Service Office, located in Panama City, the areas for "ready" employment include the service industry, construction and the tourist trade. Health care is another expanding field in the local area with the expansion of two hospitals, the recent establishment of a

rehabilitation center and plans for a private and public psychiatric hospital.

Gulf Coast College has traditionally welcomed the returning student and through the single parent/displaced homemaker program has met objectives in the following manner: (A full description of objectives follows in the Methods Section.)

- 229 Recruited to 3 seminars on "Non-traditional Careers" and "Returning to School"
- 79 Enrolled in college vocational programs
- 79 Women enrolled in "Returning Woman Course"
- 155 Logged telephone contacts or short counseling
- 1,108 Community audience participants
- 13 Women received scholarship assistance
- 57 Applications received for scholarship assistance for Fall, 1987 semester

There are no short-term employability skills training programs offered at Gulf Coast (except through the JTPA Program). Therefore, our objective to secure higher paying jobs is to place women in vocational programs that are one and two years in length. These include nursing and other health related fields, business and office practices, criminal justice and mental health technology, drafting and design, and engineering technology.

Since this program's inception in October 1986, no student has completed a program; therefore, none have been placed in jobs. However, 158 of the 384 women in contact with the Returning Woman Program, or 41%, have taken a pre-enrollment course or have enrolled in a vocational or special student course. Again, this exceeds even our most hopeful "enrollment" expectations by 282%!

METHODS:

The project was designed to recruit the single parent/displaced homemaker into college vocational programs. Objectives and methods used are as follows:

OBJECTIVE A:

TO RECRUIT 60-80 DISPLACED HOMEMAKERS AS NEW/POTENTIAL COLLEGE STUDENTS.

229 potential students were recruited to seminars, 79 were enrolled in vocational college courses. Media was utilized to inform the public of the Returning Woman Program as follows:

- a. News articles in News Herald (Attachment I).
- b. News article in Beach Bay News.
- c. Article in Gulls Cry.
- d. Day Busters TV appearance on January 7, 1986 and April 23, 1987.
- e. "A Half-time Look at Gulf Coast Community College." WKGC - February 16, 1987.
- f. Returning Woman Brochure was developed (Attachment II).

A "How to Enroll in College" workshop was held in December. The agenda and an advertising brochure is attached (Attachment III). 12 women participated.

A "Returning Woman Seminar" was conducted in February 1987 to introduce women to non-traditional careers and to give them information on vocational programs of study at GCCC. A keynote speaker addressed the group on returning to school and overcoming obstacles. She was followed by a panel of women in traditional and non-traditional fields who discussed job opportunities, and financial and personal rewards in their careers. Small group discussions were facilitated to explore concerns and issues of returning women. 49 people attended the seminar on February 7, 1987 (a total of 180 people have been recruited to date through similar seminars in previous months). Agenda attached (Attachment IV).

Ten participants were enrolled in the Tuesday night class on campus from February 12 - April 30. Ten participants were enrolled in the Tuesday morning class at the Wellness Center from February 10 - May 5. 59 participants were in spring and fall sessions. The course included 4 sessions of math, 4 sessions of English and writing skills and one session each on "Time Management," "Exercise as a Balance in Your Life," "Motivation," "Values and How that Affects Decisions,"

"Career Assessment" and "Introduction to Career Center at GCCC." (A total of 79 people have been served to date through these courses). A "Brushup on Basics" Math book was developed by a college faculty member who teaches the math portion of the "Returning Woman" course (Attachment V).

A master list of returning woman participants and potential returning women has been compiled. To date, over 200 unduplicated women are included. Some program participants have come to a seminar or support group or have had a counseling session with the coordinator. Potential students also have been identified either through counseling or telephone contact.

To date, a total of 79 women were identified as having had some contact with the Returning Woman Program through a seminar, support group or pre-enrollment, "Returning Woman" course or enrolled in credit vocational programs. As is true of most adult students, the majority of these women do well in college classes. About 12% have been referred to the Success Center for academic support. Students who have dropped out (number not included in this total) have done so because of illness or work related concerns.

Communication has been maintained with returning woman participants to encourage them as well as to inform them of non-credit career awareness courses and potential college classes. For example, a letter was sent to all February seminar participants with information on the Respiratory Therapy Program. Potential students are referred by personal introduction to the nursing program, typing program and to specific faculty members such as department chairmen on campus or to academic advisors within departments. Appointments are also arranged. Participants have been informed of personal growth classes such as "Divorce Adjustment," "Goals & Decisions" and "Career Exploration."

Informational brochures were developed and have been distributed at vocational displays, women's group meetings, churches and conferences for women.

Presentations have been made to community groups to generate interest and participation in Returning Woman Programs.

Presentations made were as follows (Attachment VI):

	<u>Participants</u>
10/13/86 - Senior Athletic Club	17
10/27/86 - Spouse Abuse Support Group	15
11/17/86 - American Business Women Association	30
11/20/86 - Civilian Wives NCSC	18

	<u>Participants</u>
01/15/87 - GCCC Board of Trustees	20
01/27/87 - Business Professional Women	6
01/22/87 - Pilot Club	25
03/05/87 - Bay County Ministerial Association	15
03/13/87 - Community Care Meeting, Northwest Florida Guidance Clinic	20
04/28/87 - Personnel Association of Bay County	22
04/28/87 - St. Andrew Methodist Church Women	26
05/13/87 - Participation in Family Fun Day at Tyndall Air Force Base	300

Plans for recruitment and news releases have been coordinated with the public relations office. Copies of news articles are attached. Also the announcement of the "Returning Woman Seminar" was on the marquee of the college.

OBJECTIVE B:

TO PROVIDE COUNSELING AND ON-GOING SUPPORT FOR THE DISPLACED HOMEMAKER.

Services have been coordinated with other offices on campus as follows:

Student Development: Older women students are referred by the student development office to the Returning Woman Program. Student needs are assessed by an interview and appropriate referrals are made on campus. The student development office, through career development administers the COPS to returning woman participants. COPS is a survey of one's interest and provides helpful career choice information. The surveys are scored by the career development office and results are sent to the student. Students are informed of the ACT Career Survey and of Choices, a computer career assessment tool (Attachment VII).

In helping women make decisions about career options, the COPS survey was given to 70% of potential program participants. Results were discussed by the career counselor during pre-enrollment courses to give women a better understanding of job clusters, education required and training programs available. COPS surveys given to individual students are discussed with the coordinator or career counselor. Students are also referred to the career development center for exploring careers with the CHOICES Computer Program. Two computers and career exploration software packets have been purchased for use by single parent/displaced homemakers in determining career choices, writing a resume, interview skills, etc.

Registrar: First-time returning woman students are allowed to register early for classes to help them gain more confidence and to allow them to register for classes at times more conducive to balancing college, job and family responsibilities. The returning woman coordinator has been designated by the registrar as an advisor for special students, i.e., those who have not declared a major or who are taking one course. During registration, the coordinator is present to distribute brochures and answer questions.

Financial Aid: Students are referred to the financial aid office for Pell grants, scholarships and loans. The financial aid officer has participated in "Returning Woman" seminars and serves on the Advisory Committee (see objective D).

JTPA: Many single parents and displaced homemakers fall under the guidelines of the JTPA program. Whenever appropriate, students are introduced to JTPA counselors for assessment.

Orientation: The coordinator made 5 presentations on the program during spring orientation. The Returning Woman Program will be included in each fall and spring session.

Because of the media publicity, the distribution of brochures and community presentations, an average of 10 calls are received each week. Phone logs are maintained on each potential student. (See sample form, Attachment VIII.)

The coordinator has interviewed or counseled with students or potential students in the office. Over 94 students or potential students have seen the coordinator.

A monthly support group for returning woman students and potential students was held on the 2nd Wednesday of each month at the 10:00 hour, at time when no regular classes are scheduled. The purpose was to provide group support to students and potential students and to discuss topics of interest or concern to older students. Some of the groups were facilitated by the coordinator and others by community or campus personnel. The schedule was as follows:

January 14th	- Get acquainted
February 11th	- "Obstacles to College"
March 11th	- "Dealing with Unsupportive Family and Friends"
April 8th	- Issues of child care and transportation

Meetings are coordinated with other appropriate departments or campus organizations such as The Success Center, F.L.A.G. (the adult organization that sponsors programs on study skills and test taking).

The coordinator spoke at a Coordinating Staff meeting which included the chairs of all divisions on campus. Chairmen offered enthusiastic support for the Returning Women Program.

A career course was planned in cooperation with JTPA staff. This class was entitled, "What Will I Be When I Grow Up," and was taught by the coordinator for JTPA. Eight potential students participated.

OBJECTIVE C:

TO DESIGN AND TEACH A COURSE CALLED "BASIC PSYCHOLOGY FOR THE RETURNING WOMAN" WHICH WILL INCLUDE, AMONG OTHERS, COMPONENTS IN FINANCIAL PLANNING, STUDY SKILLS, GOAL CLARIFICATIONS AND TIME MANAGEMENT.

The coordinator has collaborated with Social Science Faculty to develop guidelines for this course. The course will be entitled, "Human Relations," and will be offered Tuesdays and Thursdays, at 12:00-12:50pm in the fall semester. The course will be geared toward the returning woman and publicity in this regard has been disseminated to faculty advisors.

Courses were offered for single parent/displaced homemakers in "Divorce Adjustment," "What Will I Be When I Grow Up-Career Options," and "Goals and Decisions." Forty women enrolled in these non-credit classes (Attachment IX).

OBJECTIVE D:

TO PROVIDE FINANCIAL SUPPORT BY USING RESOURCES AVAILABLE IN THE COLLEGE AND COMMUNITY.

Students were referred to the financial aid office for assistance and are particularly encouraged to apply for part-time Foundation scholarships and Pell grants. The single parent/displaced homemaker program works closely with JTPA in support services.

Often the welfare system discourages a recipient from going to college. The Returning Woman Program and the financial aid office are exploring both problems and options with appropriate agencies. Several meetings have been held with community and college personnel. This issue continues to be explored.

Scholarships are requested on an as-needed basis from the community for returning students. An individual provided a \$200 scholarship for a returning woman in nursing. A \$500 scholarship fund has been established through the financial aid office for returning women. To date, 57 applications are on file for the Fall 87 semester, all requesting tuition assistance and 21 seeking child care assistance (Attachment X).

OBJECTIVE E:

TO BECOME INVOLVED IN CAMPUS ACTIVITIES.

The program has coordinated activities for students with the Success Center, F.L.A.G. (the adult student group), and other student organizations. The purpose is to offer services or programs without duplication of subject or time slot. Publicity is sent to returning women regarding on-campus workshops (e.g., study skills, test taking, time management and math are offered by the aforementioned organizations). The coordinator is now a co-advisor for F.L.A.G. This organization won the Outstanding Campus Organization at Honor's Day.

The returning woman coordinator has attended student development council meetings. The council is chaired by the dean of students. Student activities and issues relating to students on campus are discussed. The coordinator serves as an advocate for the inclusion of returning women on campus committees (e.g., Tri-College).

The coordinator has attended the study skills and time management workshop sponsored by the Success Center. The coordinator has also attended a campus "Broadcasting Seminar" and "Deaf Awareness Seminar" so that related resources might be extended to returning women.

OBJECTIVE F:

TO SERVE AS A LIAISON WITH COMMUNITY AGENCIES TO PROVIDE WOMEN IN THE PROGRAM NEEDED COMMUNITY RESOURCES.

Contact has been made with agencies that serve women, especially single parents and homemakers. Agencies include: Prevent Spouse Abuse, Inc., Tyndall Air Force Base Mental Health, Family Services, WIN, HRS and the Women's Resource Center of Gulf Coast Hospital. Contact has been maintained through personal visits, phone conversations and by including representatives of these organizations on the advisory committee. Two major conferences were co-sponsored with area

hospitals to enhance women's physical and emotional health (Attachment XI).

OBJECTIVE G:

TO PROVIDE ADMINISTRATIVE COORDINATION OF THE PROGRAM.

The coordinator has met periodically with statewide counterparts for the purpose of program comparison, networking and adoption of exemplary ideas.

The coordinator attended a Continuing Education Standing Committee meeting in December and February. She also attended the VTAE Grant Writing Workshop and the Leadership Development Conference in Tampa. A regional Leadership Development Conference was hosted by GCCC on June 17th.

A file is kept on each returning woman student or potential student who has made contact with the coordinator. Demographic data is recorded as well as career plans and progress toward those goals. Intake forms have been revised twice and a counseling sheet is included in folder (Attachment XII).

The Advisory Committee is composed of representatives from the college community, JTPA and the business community. The purpose is to plan and evaluate the Returning Woman Program so that the goals may be realized. The Advisory Committee has met twice. Membership rosters and minutes are attached (Attachment XIII).

Transcripts on all returning women students who have participated in "Returning Woman" seminars or pre-enrollment courses and who are now enrolled in vocational programs are obtained to maintain contact with students and monitor progress toward their goals.

Transcripts are in the program office for those who enrolled in fall and spring credit classes. Transcripts for students receiving funding for Summer A will be obtained at the end of Summer B.

Data was recorded on the number of participants in seminars or pre-enrollment courses, course of study, financial aid obtained and counseling support. This data is included in the report.

OBJECTIVE H:

PLACE 70% OF THE STUDENTS INTO JOBS.

The Returning Woman Program began in October 1986. All GCCC training programs are one- or two-year certificate or degree programs. Therefore, no women who were financially assisted by this project have had time to complete training or be eligible for job placement. However, several students who attended support groups are in non-traditional jobs or areas as follows:

Electronics Technician - Bendix
Office Procedures - Naval Coastal Systems Center
Reserve Police Officer - Panama City Police Department
Cashier - Scotty's Hardware

The need for initial counseling, tuition assistance and on-going group support is evident by the numbers of women who have had contact with Gulf Coast Community College during the project period.

Application has been made for a federal grant to enhance and supplement the Returning Woman Program. Initial thought has been given to institutionalizing the counseling and support program within student services and to provide courses and classes through lifelong Learning.

FINDINGS AND ANALYSIS:

SUMMARY STATISTICS OF WOMEN IN SINGLE PARENT/DISPLACED HOMEMAKER PROGRAM

Recruitment

229	Recruited to seminars (initial contacts)
94	Formal counselings
<u>61</u>	Logged phone counselings
384	TOTAL
1,108	Community participants

41% from total (seminars and counseling) have enrolled in pre-class or college vocational programs.

On-Campus

79	Enrolled in Returning Woman, pre-enrollment course
32	Students enrolled in fall vocational programs
8	Spring vocational students
*13	Summer vocational students
<u>26</u>	Unduplicated in support group
158	TOTAL
40	Students enrolled in Personal Development course
2	Non-traditional (criminal justice)
1	High wage technician (electronic technology)
4	Job placements (no student who has been assisted financially has completed a program)
57	Scholarship applications for Fall 1987

*Only students with financial assistance for tuition/books, childcare.

Expenditures on Assistance

\$ 90.00	Non-credit activities
\$639.00	Credit tuition
\$282.45	Books
<u>\$231.12</u>	Child care (the maximum for child care for the 6-week summer session was not spent because of short time and students involved.)
\$1,242.57	TOTAL

Awareness of the fact that more and more women are coming back to college for re-training has been evident at the college and in the community. Women over 25 at this institution have increased by 10% from 1985 to 1987. Counseling referrals have come from individuals, agencies and churches.

There are no short-term employability skills/training programs offered at Gulf Coast. Our objective to secure higher paying jobs will be accomplished by the placement of women in vocational programs that are one- and two-years length. These include nursing and other health related fields, business and office practices, criminal justice and mental health.

Since this program's inception in October, 1986, no student has completed a program nor is eligible for job placement. However, 41% of the women in contact with the Returning Woman Program have taken a pre-enrollment course or have enrolled in a vocational program.

Due to the conservative nature of this part of Florida, it is very difficult to encourage someone to enroll in a non-traditional occupation. Wages are on a minimum wage standard in Bay County. A high wage is considered to be \$5.00 per hour. Over minimum wage jobs are scarce and job opportunities for non-traditional fields are limited.

Non-traditional programs on our campus include aviation administration, building construction, criminal justice, drafting, engineering technology and marine technology. Most older returning students, because of age and/or physical limitations, would rather be re-trained or initially trained in traditional fields such as nursing and office technology.

Assurances have been met in as much as possible. Funds were available on a limited basis and those of greatest financial need were served. Homemakers and single parents were served in seminars and counseling. As stated previously, no funded student or any other student having contact with the program has completed a vocational program for job placement. Individuals are referred to co-operative vocational education, the career center on campus for assistance in job placement.

Personnel for this project was one professional coordinator. Through other dollars, a secretary was hired in May to provide support services to the coordinator on a part-time basis. Instructors were paid on a course by course basis to teach English, math, career skills, and personal development.

CONCLUSIONS AND RECOMMENDATIONS

The numbers served indicate that women need moral support in returning to school and support services such as tuition assistance and child care.

As stated, it is difficult to encourage women to go into high paying non-traditional programs when the job market in this area is so limited. A change in the wage scale for both men and women will have to occur before any significant change is seen. High wage jobs are more plentiful for persons with four year degrees. Competition is keen for the few high wage positions in Bay County.

Referrals have come from the community through many different avenues and word of the Returning Woman Program has spread. As a spin-off benefit to the college, many women students have come through the coordinator's office who are happily married and don't have financial need. Another large category are women who think they want to come back to school and are "gathering information."

The program has been able to purchase books, computers and software that will help women decide on career choices or help them explore resources within themselves for career change or job placement.

During this grant period, we anticipated compiling a handbook with campus resources and language. This was not done due to time and availability of existing material. A handbook would still be beneficial and hopefully will be included in next year's plans.

Recommendations are to provide individual counseling to students. Group counseling should be conducted on a regular basis during the 10:00 hour or over the lunch hour. A newsletter should be sent bi-monthly to returning students to keep them informed of non-credit classes, campus activities and to provide moral support and motivation. The coordinator should work in concert with the center for lifelong learning to provide pre-enrollment classes on basic skills, career exploration and personal development courses. Finally, there is a great need to provide tuition, books and child care assistance to returning women. Although this program works hand-in-hand with JTPA and will continue to do so, many women do not qualify for those programs but are still needy single parents, or displaced homemakers.

It is also suggested that the Returning Woman Program eventually be housed in the student development area so that access to counseling, financial aid and other services might be facilitated.

Gulf Coast Community College has an outstanding reputation for CARING about individuals and the re-entry students served by this program have clearly received that message!

GCCC 'Returning Woman Seminar' set

Gulf Coast Community College will sponsor a free "Returning Woman Seminar" on Saturday from 9 a.m. until 12:30 p.m. in the George G. Tapper Health Sciences Building lecture hall. This seminar is designed for women who are considering returning to school.

Following the keynote address by Dr. Sandra Rackley, associate dean of undergraduate studies at Florida State University, a panel will explore professions where there are jobs for women, the position of women on the career ladder in those careers, and financial and personal rewards provided by them. At 11:15 a.m., participants will divide into small discussion groups.

After the seminar, participants may sign up for a 12-week, pre-enrollment Returning Woman course, which will include math and English skills, time management, goal setting, career assessment and personal development. This course will be offered once a week at the Wellness Center at HCA Gulf Coast Hospital and once a week at the college. Although there is no fee for the Feb. 7 seminar, those interested should call 769-1551, extension 355, to register.

2/3/87 News Herald

NEWS-HERALD, Panama City, Fla., Saturday, Feb. 7, 1987

Page 3B

AREA

GCCC offers 'returning women' course

Gulf Coast Community College will offer a 12-week pre-enrollment course for returning women which will include math and English skills, time management, goal setting, career assessment and personal development.

This course will be offered once a week at the Wellness Center at HCA Gulf Coast Hospital beginning Feb. 10 at 10:30 a.m. and also at Gulf Coast Community College beginning Feb. 12 at 6:30 p.m. in Room 317 of the George G. Tapper Health Sciences Building.

The cost of the course is \$45. Scholarships are available. Those interested may register by calling 769-1551, extension 355, or by coming to either of the class sites.

GCCC single-parents help

Grants, child care and transportation assistance for the fall semester are available for single parents or displaced homemakers who are enrolled in vocational programs at Gulf Coast Community College.

Displaced homemakers are women who have not been employed outside the home and now need training or retraining. Women of greatest need will be served first. Also, limited assistance for tuition or books is available for returning women in college transfer or vocational programs at GCCC.

Applications must be filed prior to July 1.

For more information and an application for assistance, contact Alice Kingston, program coordinator, at 769-1551, extension 429.

5/17/87 News Herald

GCCC offers women support, hope

by JANICE PRENDERGAST
News Editor

As the economic need for two-income families continues to grow, more and more housewives are abandoning their posts in favor of a college education.

For many of these women, returning to college can be an exercise in worrying — about making good grades, managing overdemanding time and fitting in with students who refer to them as "ma'am."

Gulf Coast Community College now has a program to help alleviate the fears and worries of these women. The Returning Woman Program, according to coordinator Alice Kingston, is designed to "encourage and support" women who are re-entering the collegiate life after an extended absence.

The program consists of seminars, counseling on financial aid and a 15 week course which addresses time management, study skills, and includes a brush-up on math and English skills.

"That's what a lot of women get really antsy about...math skills," Kingston said. "The course also gives them a chance to be in a classroom situation without it being threatening."

Kingston says more and more women are returning to college in order to enhance their employment opportunities, and they make the decision to obtain their college degree for a number of different reasons.

"Many times they return because their children have grown up and left home, or they had married right after high school and never had the opportunity to

women, and 40 women enrolled in the 15 week course. Their ages ranged from mid-twenties up through mid-sixties. The most important result of the program, says Kingston, is the confidence it gives the women about enrolling in school.

"Some of the women I've talked to have said the main thing they get out the classes is the feeling that they can do it, and there are other people in the same boat with them," she said. "The course opens up a whole new world for them."

Kingston says that many returning women worry about the adjustments which will have to be made in juggling a job, school and family. The women are encouraged to draw up "contracts" with their families which outline what each family mem-

bers' responsibilities are on the days or nights of class.

Carole Summey, who returned to college after 20 years, enrolled in the Returning Woman Program last semester, and she took that advice. "You have to have support from your family, so I drew up a contract with them before I started class...we all work together," she said. "You do have to sacrifice some things, you can't always be a cub scout leader."

Her greatest fear about returning to school was the managing of her time. "People always say you should set priorities, but I think you should set them daily," she notes.

Summey credits GCCC's instructors with recognizing the needs of women returning to school after an extended ab-

sence.

"They really support the returning woman...they will provide extra books if you're having trouble in a class or give advice to help you study," she said.

The Returning Woman Program is holding a free workshop to help women get ready for January enrollment on Dec. 9 from 7 p.m. to 9 p.m. in the George G. Tapper Health Sciences Lecture Hall. Information on course offerings, career choices, child care assistance, admissions and registration and placement tests, among other things, will be available.

Women interested in attending the seminar should call 769-1551 ext. 355 to register. Dec. 6 is the deadline.

The program consists of seminars, counseling on financial aid and a 15 week course which addresses time management, study skills, and includes a brush-up on math and English skills.

"That's what a lot of women get really antsy about...math skills," Kingston said. "The course also gives them a chance to be in a classroom situation without it being threatening."

Kingston says more and more women are returning to college in order to enhance their employment opportunities, and they make the decision to obtain their college degree for a number of different reasons:

"Many times they return because their children have grown up and left home, or they had married right after high school and never had the opportunity to go to college," she explains. "Other times, the women return because of a divorce or death in the family, and they need to get a job for the income immediately."

Over 100 women attended last semester's seminar for returning

Returning Woman program beneficial to students

Susan Bourkard
Staff Writer

The Returning Woman Program began its third session since 1986 Saturday at the Health Sciences Lecture Hall on campus. The Returning Woman Program is an organization at Gulf Coast Community College which offers many important services to the community and helps fulfill the needs of women who are ready, but perhaps hesitant, to return to school.

The program began in 1986 and is coordinated by Alice Kingston, who is located in room 319 of the Health Sciences Building, ext. 429. The purpose of Saturday's seminar was to introduce interested women to the program, its services and its capacity as a valuable resource.

The women who turned out for the seminar had the opportunity to hear Dr. Sandra Rackley, associate dean of undergraduate studies from Florida State University, give an enthusiastic and inspirational welcome. A speakers' panel followed her address. The panel was comprised of Pam Hellett, Victim Advocate, Bay County Sheriff Department; Mary Helen Barnes, Director Children's Home Society; Teresa Pohlman, Engineer, Naval Coastal Systems; Ann Syfrett, Director Nursing Education, GCCC; Ginger Worley, Counselor JTPA, GCCC; and Bob Jones, Chairman of Technology, GCCC.

Dr. Rackley stated that FSU has become aware of the Returning Woman's Program since, she said, "The adult student is of great interest to FSU in Tallahassee because we are seeing more and more of them coming to the campus every year. We were not really equipped to deal with the adult student until recently." Rackley described GCCC's Returning Woman Program as a "flagship program" in the college system.

The speakers at the seminar varied in their occupations and experiences, but essential-

ly carried the same message to the audience. They each offered enthusiasm, motivation and support for the returning woman and stressed personal goal setting and flexibility for potential students.

A 12-week course offered by The Returning Woman Program will begin in February. For those wishing to participate in a daytime program, the group will meet every Tuesday, beginning on Feb. 10 for three hours at the Wellness Center in Panama City, from 10:30 a.m. to 1:30 p.m. The

night course will be offered at the Health Sciences Building on campus, Feb. 12, from 6:30 p.m. to 9:30 p.m. There will be a \$45 charge for this course, which includes basic math and English studies, taught by campus instructors. The course also emphasizes personality development, goal setting, decision making and time management. This program is non-credit and provides the potential student with classroom experience without the pressure of a grading system.

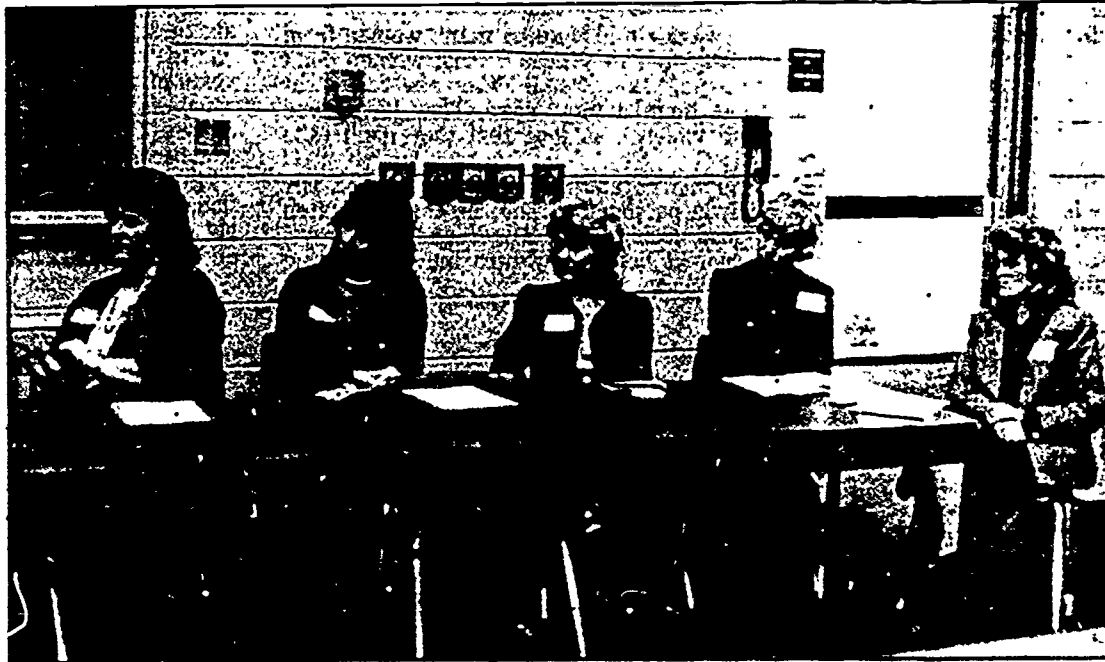
The Returning Woman Program also serves as a support

group which meets the second Wednesday of every month at the 10 a.m. hour in the Health Sciences Building. Anyone who wishes to attend is invited. Kingston stated in an interview last week that she hoped to expand the 10 a.m. hour to include study skills and test-taking techniques.

Kingston feels that the program has been successful so far. She stated that from a total of 139 women who attended the seminars last year, 63 subsequently enrolled in campus courses. Targeted at women who have been out of school for quite a while and are coming back, the Returning Woman Program appears to be a valuable service for a significant number of the student population. According to Kingston, one quarter of the student body is over 25 years of age, and the average age of the GCCC student is 28.

The program is grant-funded and Kingston stated, "We hope to have more money available in the future for child-care and tuition for those women who require additional aid." The Returning Woman Program also works closely with JTPA and other divisions on campus.

Kingston stated that one does not have to be a student to participate in any of the services offered by the program. She said, "The Returning Woman Program is basically a service to the community but one of its basic goals is the recruiting of women to enroll at GCCC."



Andrea Johnson

A panel of guest speakers were present at the recent "Returning Woman" seminar.

RADIO BROADCAST - WKGC
February 16, 1987

I am Alice Kingston, Coordinator of the Returning Woman Program. This is a halftime look at Gulf Coast Community College. The Returning Woman Program is an outgrowth of Gulf Coast's long time commitment to the older woman student. Ten years ago, a Women's Center was begun to support women students through counseling and workshops. Over the year, a variety of services have been offered. At present, 27% of the student body is over 25 and the percentage of older women students has increased by 10% in the last five years. For the purpose of this program, any woman who has been out of college or the work place for an extended period of time is considered a Returning Woman. She may be a single parent or homemaker who, because of divorce, death or disability of a spouse, needs to upgrade her skills or receive training for a higher paying job. Sometimes she may be a mother whose children are now in school and always wanted to go to college or she may be a woman who attends college for personal enrichment. Today the Returning Woman Program conducts seminars and pre-enrollment classes for women considering a return to college and provides support and information to students enrolled on campus.

During the past year, three Saturday morning seminars have been offered to introduce careers, especially non-traditional careers, to potential students. Following a panel discussion of careers, there are small group discussions to talk about concerns and issues of returning to school.

Two 12 week sessions of the Returning Woman pre-enrollment classes are being conducted now. These sessions are taught by instructors at the college and include a review of basic English and math skills as well as sessions on time management, career assessment and personal development.

On campus, the Returning Woman Program serves as a catalyst to other services and resources, such as Student Development, Financial Aid, JTPA, and the Career Center. Also a bi-monthly coffee is held to discuss issues that are important to older students. Topics such as child care arrangements, dealing with unsupportive family and friends and decision making will be discussed, this is also a time to exchange ideas and gain mutual support for each others' efforts in balancing a family, job, and school. Women who are considering returning to college are welcome to come. The coffees are held in Room 320 of the Health Sciences Building on the 2nd and 4th Wednesday of the month.

Finally, the Returning Woman Program serves to support the adult student who has fears she won't be able to study again or has concerns about "what will I be when I grow up?"

For more information, contact the Returning Woman Office in Room 319 of the George G. Tapper Health Sciences Building. Phone 769-1551, ext. 429.

I am Alice Kingston, Coordinator of the Returning Woman Program, and this has been a halftime look at Gulf Coast Community College.

"WHERE WILL I BE 5 YEARS FROM NOW?"

Many women are asking themselves this question. The answer becomes increasingly clear: Wherever I want to be! The key to unlocking your potential is *education*. Listen to the reasons given for returning to school.

"My youngest child has just started off to school and I have some time to do some of the things that I've put off."

"I am raising two children by myself and I have to work to support all of us. I need more than a minimum wage job!"

"All of my children are grown and are out on their own. My husband and I do many interesting things together. While he is working during the day, however, I have some time to develop other interests — things like reading literature, psychology and history."

"I want to become an elementary teacher. I have faith that I have been given the talent and ability to do it and feel that it is a calling that will enrich my family and the community."

"I want to do it for myself."

The returning Woman Program is funded in part by the State of Florida Division of Vocational, Adult and Community Education and by the Continuing Education Department of Gulf Coast Community College.



The Returning Woman Program



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GULF COAST COMMUNITY COLLEGE

5230 W. Hwy. 98
Panama City, Florida 32401

(904) 769-1551

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28

Gulf Coast Community College

WHO ARE "RETURNING WOMEN"?

Any woman over 25 who has been out of college for several years. Many are single parents. Some have children in school and now it's Mom's turn. Some need or want a career change and some take courses for personal enrichment.

WILL I BE THE ONLY "OLD" LADY ON CAMPUS?

No. The average age of the student body is 28. One fourth of all students are over 25. In fact the typical community college student is an older person who is attending college part time and has additional responsibilities.

IT'S BEEN SO LONG!! WHAT IS AVAILABLE TO PREPARE ME FOR COLLEGE?

The Returning Woman Program conducts two seminars a year on career exploration and education. A 12 week course is offered to brush up on basic math and English skills as well as to give some experience in a classroom situation and some training in communication, goal setting and self esteem. The course is offered on campus and off campus.

BUT, I DON'T KNOW WHAT I WANT TO "DO" OR MAJOR IN?

Through the Returning Woman Program and the Career Center, you can take interest and career inventory surveys to help you decide. You can also be a special student and take up to 15 credit hours before you have to declare a major.

CAN I REALLY LEARN TO STUDY? I DIDN'T DO SO WELL IN HIGH SCHOOL.

Adults who return to school really want to be here. They are highly motivated and want to succeed. There are also campus instructors available to help with study and test taking skills.

WILL I BE AT A DISADVANTAGE IN CLASS BECAUSE I AM OLDER?

Adults do not lose the ability to learn with maturity. In fact life experiences enhance their success in college and enrich class discussions.

HOW LONG WILL IT TAKE ME TO FINISH?

It, of course, depends on the program. There are one and two year certificate programs as well as AA and AS degree programs and transfer to 4 year institutions. Many students only take one or two classes a semester so it is not uncommon at all to take several years to complete a degree.

IS FINANCIAL AID AVAILABLE FOR OLDER STUDENTS?

Yes. There are grants, scholarships and loans. There are some scholarships specifically for women who have been out of the workplace or college. It just takes a little effort to search them out and the financial aid director will help you.

WHAT'S FOR ME ON CAMPUS?

Monthly coffees are held as a support group for other returning women students. Sometimes there is a program or speaker. Assistance with registration is available as well as counseling by the coordinator. You will be kept well informed of personal and professional workshops and seminars that are available for women.

DOES IT COST TO PARTICIPATE IN THE RETURNING WOMAN PROGRAM?

Not usually. Counseling and referral assistance are part of the service of the college. Sometimes there is a fee for a particular course or workshop.

WHERE IS THE RETURNING WOMAN OFFICE?

Room 319 of the George G. Tapper Health Sciences Building. 769-1551, ext. 429. The coordinator is Alice Kingston.



"There's so much to learn."

**STATE LAW REQUIRES THAT
STUDENTS VERIFY RESIDENCY**

For purposes, a Florida resident is defined as one who has resided in the State of Florida for at least the past twelve (12) consecutive months. Military dependents stationed in Florida are included.

Fees for out of state residents are greater than Florida residents.

YOU MUST CHECK ONE OF THE FOLLOWING:

1. I do hereby solemnly affirm that I am a Florida resident.
2. I am not a Florida resident. (Must pay double fees).

I declare under penalty of perjury punishable by law as a misdemeanor under section 837.06, Florida Statutes, that the foregoing residential statement is true and correct.

ATTACHMENT II**REGISTRATION FORM FOR NON-CREDIT, PROFESSIONAL DEVELOPMENT ACTIVITIES**

COURSE NAME: _____

COURSE DATE: _____ COURSE TIME: _____ IN STATE COST: _____

DAYTIME PHONE: _____ SOCIAL SECURITY NO.: _____

RACE: White, not Hispanic American Indian/Alaskan Native Hispanic AGE: _____

Black, not Hispanic Asian/Pacific Islander Non-resident Allen SEX: Male Female

NAME: _____

ADDRESS: _____

(No./Street/Box)

(City)

(State)

(Zip)

GULF COAST COMMUNITY COLLEGE

SIGNATURE REQUIRED

DATE

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Gulf Coast Community College
5230 West Highway 98
Panama City, Florida 32401



Come to college!!!
The Returning Woman Program
Gulf Coast Community College

Give Yourself
A Present

GULF COAST COLLEGE FACTS...

- You are not alone.
- The average age of our student is 28.
- 1/4 of all students are over 25.
- It takes 6 years for many women to complete a 2 year program by going part time.
- Day, evening, and weekend classes are available.
- Some programs are 1 year certificate.
- Low cost — \$18 per semester hour — financial aid available.
- Adults have life experiences that enhance their success in college.
- The ability to learn does not decrease with maturity.

**A COLLEGE EDUCATION IS A GIFT
THAT INCREASES IN VALUE FOR YOU
AND YOUR FAMILY**

**LEARN A NEW SKILL FOR A CAREER
CHANGE OR GIVE YOURSELF A GIFT
OF ENRICHMENT**

**CONTINUE YOUR EDUCATION,
REGARDLESS OF WHERE YOU
STOPPED OR HOW LONG YOU'VE
BEEN OUT OF SCHOOL**

ATTEND A FREE WORKSHOP TO GET READY FOR JANUARY ENROLLMENT

WHEN: December 9, 1986
7:00-9:00 p.m.

WHERE: George G. Tapper Health
Sciences Bldg., Lecture Hall

COST: Free, but please call to
register by December 6, 1986

**For more information and to register
call 769-1551, Ext. 355**

INFORMATION ON:

Types of programs
Course offerings
How to read a schedule
Career choices
Placement tests
Financial aid
Admission and registration
Support group
Child care assistance
Special students
Individual academic preparation
JTPA — Job Training Partnership Act



RETURNING WOMAN WORKSHOP

How To's of January Enrollment

December 9, 1986

7-9 p.m.

Welcome	Alice Kingston, Coordinator, Returning Woman Program
Types of Programs Schedules Admissions	Linda Van Dalen, Counselor, Admissions
Financial Aid	Dan Smith, -Coordinator, Financial Aid
Job Training Partnership Act	Cheryl Flax, Director JTPA
Success Center	Chelsea Gooding, Returning Woman Student
Child Care, Support Group	Alice Kingston

GOOD LUCK AND HAPPY HOLIDAYS



WOMEN: HOW TO GET READY FOR THE JOBS OF THE FUTURE

LISTEN TO WHY OTHER WOMEN HAVE RETURNED TO SCHOOL

"I am raising two children by myself and I have to work to support all of us. I need more than a minimum wage job."

"My youngest child has just started off to school and I have some time to do some of the things that I've put off."

"My husband is a number of years older than I am. I need to be prepared to take care of myself."



**EXPLORE YOUR POTENTIAL AT THE
RETURNING WOMAN FREE SEMINAR
Saturday, February 7, 1987
9:00 - 12:30
George G. Tapper Auditorium, Health Sciences Bldg.**

- 9:00 - Registration
- 9:15 - Welcome and Keynote Address, Dr. Sandra Rackley, Associate Dean, Undergraduate Studies, Florida State University
- 9:45 - **Explore the Professions:** Where are the jobs for women? Where are women on the career ladder? What are the financial and personal rewards?
Career Panel:
LAW ENFORCEMENT: Pam Hellett, Victim Advocate, Bay County Sheriff Department
SOCIAL WORK: Mary Helen Barnes, Director, Children's Home Society
ENGINEERING: Teresa Pahlman, Electrical Engineer, NCSC
NURSING: Ann Syfrett, Director Nursing Education, GCCC
MID MANAGEMENT: Karen Sexton, Management Assistant, NCSC
EDUCATION AND JOB PLACEMENT: Ginger Warley, Counselor JTPA
- 11:15 - **EXPLORE THE PROGRAM AND THE PERSON**
Small Group Facilitators
Susanne Houff, Student Development Director, FSU P.C.
Rosemary Rauta, Counselor, Prevent Spouse Abuse, Inc.
Ginger Worley, Counselor, JTPA, Gulf Coast Community College
Millie Tucker, Director of Special Youth JTPA, Northwest Mental Health Center
- 12:00 - Closing Remarks: Dr. Rackley
- 12:15 - Registration for 12 week college prep course

12 Week Returning Woman College Prep Course*

Meet once a week and sharpen your skills.

Topics Include:

1. Refresher classes in English and writing skills
2. Refresher classes in Math
3. Time Management
4. Career Assessment
5. Personal Development

Daytime Class: Wellness Center of Gulf Coast Hospital

Begins: Feb. 10 10:30-12:30
Cost \$45

Registration:
After free seminar Feb. 7
or GCCC Registrar's office. 8:00 am-4:00 pm Mon-Fri.

*Registration: On Site: After Seminar
Or at Registrar's Office GCCC. House 8:00 - 4:00

Sponsored by GCCC Returning Woman Program 769-1551 Ext 429 or 355

GULF COAST COMMUNITY COLLEGE
Equal Opportunity Institution 36

The "Returning Woman" Seminar
 Gulf Coast Community College
 Saturday - February 7 9:00 - 12:30
 George Tapper Health Science Building, Lecture Hall
 Alice Kingston, Coordinator

PROGRAM

- 9:00 a.m. Registration and Coffee
- 9:30 a.m. WELCOME: Dr. Sandra Rackley, Associate Dean, Undergraduate Studies, FSU
- 9:45 a.m. EXPLORE THE PROFESSIONS: Where are the jobs for women?
 Where are women on the career ladder?
 What are the financial and personal rewards?
- Speakers panel
- Law enforcement - Pam Hellett, Victim Advocate Bay County
 Sherriff Department
- Social Work - Mary Helen Barnes, Director, Childrens Home Society
- Engineering - Teresa Pohlman, Electrial Engineer, Naval Coastal
 Systems Center
- Nursing - Ann Syfrett, Director Nursing Education, Gulf Coast
 Community College
- Mid Management - Karen Sexton, Management Assistant, Naval
 Coastal Systems Center
- Education And Job Placement - Ginger Worley, Counselor JTPA, Gulf
 Coast Community College
- Non Traditional Programs - Bob Jones, Chairman of Technology, Gulf
 Coast Community College
- 11:00 a.m. BREAK
- 11:15 a.m. EXPLORE THE PROGRAM AND THE PERSON
- Career Survey Inventory
Small Group Facilitators
- Susanne Houff, Student Affairs Coordinator, FSU - Panama City Campus
 Rosemary Routa, Counselor, Prevent Spouse Abuse, Inc.
 Ginger Worley, Counselor, JTPA
 Millie Tucker, Director Special Youth, JTPA, Northwest Florida
 Mental Health Center
- 12:00 p.m. CLOSING REMARKS: Dr. Rackley
- 12:15 p.m. REGISTRATION for 12 week college prep course

#

#

$\frac{1}{2}$

$\frac{9}{10} \div 1'$

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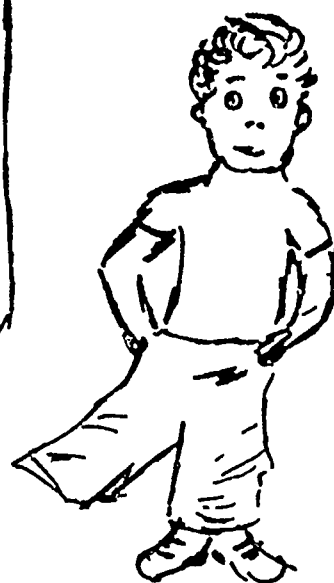
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$\frac{2}{3} - \frac{1}{4}$

+

$2x^2 \cdot 4x^2$



MATH FOR RETURNING WOMEN

by
JANICE McFATTER

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THE NUMBERS OF ARITHMETIC

Algebra is an extension of arithmetic. Whole numbers include 0,1,2,3,4,... and a review of the operations of whole numbers is presented.

Select the correct answer.

$$\begin{array}{r}
 1. \quad 26,432 \\
 \quad \quad 1,068 \\
 \quad + 2,179 \\
 \hline
 \end{array}$$

- a. 28,579 b. 30,579 c. 30,779 d. 29,679 e. none of these

- 2. A group sold 436 tickets on Monday, 1,018 on Tuesday, and 564 tickets on Wednesday. How many tickets did they sell for all three days?
 - a. 2,028 b. 2,017 c. 3,007 d. 2,018 e. none of these

- 3. $27,050 - 10,768 =$
 - a. 16,392 b. 27,392 c. 26,282 d. 16,282 e. none of these

- 4. $75,000 - 19,856 =$
 - a. 55,144 b. 57,144 c. 55, 244 d. 94,856 e. none of these

- 5. $72 \times 100 =$
 - a. 720 b. 7,200 c. 7020 d. 702,000 e. none of these

- 6. $2,706 \times 304 =$
 - a. 822,624 b. 82,004 c. 3,010 d. 822,724 e. none of these

- 7. $459 \times 8 =$
 - a. 3,672 b. 3,572 c. 3,682 d. 4,672 e. none of these

- 8. Jane typed 87 pages with 53 lines on each page. Each line had 11 words. How many words did Jane type?
 - a. 4,611 b. 50,721 c. 51,721 d. 50,621 e. none of these

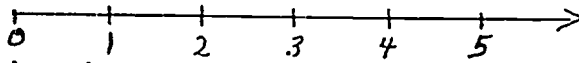
9. An auditorium with 37 rows has 63 seats in each row. How many seats are there in the auditorium?
a. 1,231 b. 2,231 c. 2,331 d. 2,431 e. none of these
10. Which of the following is false?
a. $0 \div 7 = 0$ b. $5 \div 0 = 0$ c. $3 \div 3 = 1$ d. $24 \div 1 = 24$
11. $51,060 \div 51 =$
a. 11 R 9 b. 100 R 9 c. 1,001 R 9 d. 1,000 R 60
12. Joe bought a car for \$7,560. Find the amount of each monthly installment if he paid \$288 in cash and arranged to pay the remainder in 36 equal monthly installments.
a. \$210 b. \$220 c. \$202 d. \$22 e. none of these

Answers:

1. d
2. d
3. d
4. a
5. b
6. a
7. a
8. b
9. c
10. b
11. c
12. c

THE NUMBER LINE

A number line may be used to picture the whole numbers. Draw a line and choose a zero point and a length to represent 1 unit. All points spaced 1 unit apart to the right of zero are labeled with the whole numbers in order.



This number line is nice to use to compare numbers. For example, all numbers to the right of four are greater than 4. All numbers to the left of 3 are less than 3.

Symbol	Meaning	Example
>	is greater than	$7 > 2$
<	is less than	$3 < 24$

Less than: $N < M$ if N lies to the left of M on the number line.
 Greater than: $N > M$ if N lies to the right of M on the number line.

Compare the numbers using the symbols < or > .

1. 7 _____ 32
2. 32 _____ 12
3. 18 _____ 75
4. 0 _____ 2
5. 1 _____ 8
6. 32 _____ 31

The statements such as $43 > 25$, $72 < 78$, and $0 < 5$ are called inequalities.

Answers:

1. <
2. >
3. <
4. <
5. <
6. >

PERFORMING OPERATIONS WITH ZERO AND ONE

Every subtraction statement corresponds to an addition statement.

$$14 - 2 = 12 \text{ since } 14 = 12 + 2$$

Multiplication is repeated addition.

$$5 \times 3 \text{ means } 3 + 3 + 3 + 3 + 3$$

Note: There are several ways to show that two numbers are being multiplied. For example, to multiply 5 times 3 we may write

$$5 \times 3, 5 \cdot 3, 5(3), (5) 3, (5)(3)$$

Note: If $5 \times 3 = 15$, then the factors of the product, 15, are 3 and 5.

Division is related to multiplication. For example,

$$\frac{6}{3} = 2 \text{ because } 6 = 3 \times 2$$

Rules for working with zero and one.

1. If zero is added to (or subtracted from) any whole number, the answer is that whole number.
2. If any whole number is multiplied times zero, the answer is 0.
3. Division by zero is undefined.
4. If zero is divided by a nonzero number, the answer is zero.
5. If any whole number is multiplied by 1, the answer is that whole number.
6. If any whole number is divided by 1, the answer is that whole number.

Complete each statement:

1. $29 + 0 = \underline{\hspace{2cm}}$

2. $5 \div 5 = \underline{\hspace{2cm}}$

3. $0 \div 7 = \underline{\hspace{2cm}}$

4. $9 \div 0 = \underline{\hspace{2cm}}$

5. $5 \times 0 = \underline{\hspace{2cm}}$

6. $23 \div 1 = \underline{\hspace{2cm}}$

EXPONENTS AND SYMBOLS OF GROUPING

There are times when a whole number is repeated as a factor in a product. For example, $8 = 2 \times 2 \times 2$.

Product	Notation	Read as
$2 \cdot 2 \cdot 2$	2^3	2 cubed
$7 \cdot 7$	7^2	7 squared
$5 \cdot 5 \cdot 5 \cdot 5$	5^4	5 to the fourth power

The raised whole number is called the exponent. It tells how many times the other number, called the base, is to be used as a factor in a product. For example; 7^3 ; the exponent is 3 and the base is 7.

If parentheses appear in an expression, they indicate the order in which operations are to be performed. Parentheses mean to "do me first".

A fraction bar acts like parentheses in division problems. A fraction bar means "simplify the top and simplify the bottom before performing the division."

ORDER OF OPERATION (If there are no parentheses)

1. Deal with any exponents.
2. Perform multiplications and/or divisions from left to right.
3. Perform addition and/or subtraction from left to right.

Simplify:

1. 3^2
2. 5^3
3. 2^4
4. $(5 + 2) \cdot 6$
5. $4 + (3 \cdot 2)$
6. $(3 + 2)(1 + 2)$
7. $3^2 + \frac{8}{2}$
8. $\frac{24 - 4}{4 + 1}$
9. $3 \left(4 + \frac{5}{5} \right) - 2$
10. $3 \cdot 2^3$
11. $2^2(5 + 0)$
12. $\frac{7 \cdot 8 - 2 \cdot 3}{5^2}$
13. $7 + 2 \cdot 3$

Answers:

1. 9
 2. 125
 3. 16
 4. 42
 5. 10
 6. 15
 7. 13
 8. 4
 9. 13
 10. 24
 11. 20
 12. 2
 13. 13
- 44

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DECIMALS

Each digit in a decimal number has a certain place value.

<u>Decimal Number</u>	<u>Meaning</u>	<u>Fraction</u>
0.7	7 tenths	$\frac{7}{10}$
0.23	23 hundredths	$\frac{23}{100}$
0.123	123 thousandths	$\frac{123}{1000}$
13.73	13 and 73 hundredths	$13 \frac{73}{100}$ or $\frac{1373}{100}$

To change a fraction to a decimal number, divide the numerator by the denominator.

Rounding off decimal numbers:

1. Look at the digit in the place immediately to the right of the place that is to be rounded.
2. If the digit in the place to the right is less than 5, leave the digit as it is.
3. If the digit in the place to the right is more than 5, add 1 to the digit in the rounding place.

To add or subtract decimal numbers:

1. Write the problem vertically. Line decimal points beneath each other.
2. Add or subtract in the usual way, keeping the decimal point in its original position.

To multiply decimal numbers:

1. Multiply the digits. Ignore the decimal points.
2. Add the number of places to the right of the decimal point in the numbers being multiplied. This sum gives the number of places there must be to the right of the decimal point in the product.
3. Locate the decimal point in the answer by counting off the places from the right.

To divide decimal numbers:

1. Change the divisor to a whole number by moving the decimal point to the right as many places as necessary.
2. Move the decimal point in the dividend the same number of places to the right.
3. Locate the decimal point in the quotient directly above the new decimal point location in the dividend.
4. Divide as usual.

1. $38.67 + 14.26 =$
 a. 42.83 b. .4293 c. 52.83 d. 52.93
2. $17 + 12.1 + .57 =$
 a. 100.2 b. 25.77 c. 90.6 d. 29.67
3. $72.24 - 9.7 =$
 a. 74.46 b. 63.27 c. 62.54 d. 63.17
4. $.13.9 - 6.94 =$
 a. 6.36 b. 7.96 c. 6.96 d. 7.36
5. James had \$71. He spent \$19.50 for dinner and \$32.99 for a shirt. How much money does he have left?
 a. \$18.51 b. \$52.49 c. \$19.61 d. \$28.51
6. $5000.7 - 26.83 =$
 a. 4914.4 b. 4972.87 c. 4973.87 d. 4982.77
7. Round 57.853 to the nearest tenth.
 a. 57.86 b. 57.85 c. 57.9 d. 57.8
8. Round 8.3078 to two decimals.
 a. 8.308 b. 8.31 c. 8.30 d. 8.3
9. Which one statement below is false?
 a. .0837 rounds to .084 to the nearest thousandth.
 b. .07857 rounds to .08 to the nearest hundredth.
 c. 1.4213 rounds to 1.4 to one decimal.
 d. .39251 rounds to .39 to two decimals.
 e. .29947 rounds to .300 to the nearest thousandth.
10. Which of the following is false?
 a. $.792 \div .21 = 79.2 \div 21$ b. $9.54 \div .2 = 95.4 \div 2$
 c. $23.1 \div .001 = 23100$ d. $.8623 \div .13 = 8623 \div 13$
 e. $45 \div .023 = 45000 \div 23$

11. Find the decimal equivalent of $\frac{2}{5}$.
 a. .25 b. 2.5 c. .4 d. .04 e. none of these
12. Circle the fractions that represent terminating decimals.
 $\frac{3}{100}$ $\frac{7}{20}$ $\frac{2}{3}$ $\frac{1}{17}$ $\frac{1}{8}$ $\frac{7}{11}$ $\frac{7}{12}$
 $\frac{9}{125}$ $\frac{1}{18}$ $\frac{1}{15}$ $\frac{11}{40}$ $\frac{3}{80}$
13. Find the decimal equivalent of $\frac{7}{11}$
 a. .63 b. $6.\overline{33}$ c. $.\overline{63}$ d. $\overline{.63}$
14. Which is larger: .013, .065, .138, .14 ?
 a. .013 b. .065 c. .138 d. .14
15. $3.005 = ?$
 a. $3\frac{1}{2}$ b. $3\frac{1}{5}$ c. $3\frac{1}{20}$ d. $3\frac{1}{200}$ e. none of these
16. If 9 peaches cost 180 cents, find the cost of one peach.
 a. 2¢ b. 20¢ c. 9¢ d. 1620¢ e. none of these
17. If an object weighs 42 pounds, find the weight of 7 of these objects.
 a. 49 pounds b. 35 pounds c. 294 pounds d. 6 pounds
18. If 5 candy bars cost 125¢, find the cost of 4 candy bars.
 a. 25¢ b. 100¢ c. 125¢ d. 500¢
19. If 16 articles cost 96¢, find the cost of 24 articles.
 a. 144¢ b. 64¢ c. 150¢ d. 72¢
20. What decimal part of 40 is 51.2 ?
 a. 1.28 b. .78125 c. 12.8 d. 2,048

Answers:

1. d 2. d 3. c 4. c 5. a 6. c 7. c 8. b 9. e 10. d
 11. c 12. $\frac{3}{100}$ $\frac{7}{20}$ $\frac{1}{8}$ $\frac{9}{125}$ $\frac{11}{40}$ $\frac{3}{80}$
 13. d 14. d 15. d 16. b 17. c 18. b 19. a 20. a

To multiply two (or more) fractions, multiply their numerators together and their denominators together.

$$\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d} \quad \text{where } b \neq 0 \text{ and } d \neq 0$$

To divide two fractions :

$$\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{a \times d}{b \times c} \quad \text{where } b \neq 0, c \neq 0, d \neq 0.$$

A mixed number consists of a whole number and a fraction.

Change $2\frac{3}{5}$ to a fraction.

1. Multiply the whole number (2) by the denominator (5) of the fraction.
2. Add the result (10) to the numerator (3) of the fraction and place this result over the denominator (5) of the fraction

Then, $2\frac{3}{5} = \frac{13}{5}$.

Answers to the next two pages:

1. d
2. a
3. d
4. c
5. a
6. d
7. d
8. b
9. c
10. d
11. b
12. d
13. c
14. 10 times
15. \$39
16. $3\frac{5}{8}$
17. 816 pks.
18. $13\frac{13}{16}$

1. $\frac{3}{4} \times \frac{8}{11} = ?$

- A.
- $1\frac{1}{5}$
- B.
- $\frac{9}{22}$
- C.
- $\frac{9}{44}$
- D.
- $\frac{6}{11}$
- E. none of these

2. $5 \times \frac{2}{3} = ?$

- A.
- $3\frac{1}{3}$
- B.
- $\frac{1}{3}$
- C.
- $\frac{2}{3}$
- D.
- $2\frac{1}{3}$
- E. none of these

3. $\frac{4}{5} \times 8 = ?$

- A.
- $\frac{1}{10}$
- B.
- $2\frac{2}{5}$
- C.
- $1\frac{3}{5}$
- D.
- $6\frac{2}{5}$
- E. none of these

4. $3\frac{1}{2} \times 5\frac{2}{3} = ?$

- A.
- $15\frac{1}{3}$
- B.
- $23\frac{4}{5}$
- C.
- $19\frac{5}{6}$
- D.
- $18\frac{1}{6}$
- E. none of these

5. $\frac{3}{7} \times \frac{5}{6} \times \frac{8}{25} = ?$

- A.
- $\frac{4}{35}$
- B.
- $\frac{6}{35}$
- C.
- $\frac{1}{3}$
- D.
- $\frac{1}{7}$
- E. none of these

6. $\left(\frac{4}{5}\right)^2 = ?$

- A.
- $\frac{8}{25}$
- B.
- $\frac{5}{7}$
- C.
- $\frac{4}{5}$
- D.
- $\frac{16}{25}$
- E. none of these

7. $\left(2\frac{1}{3}\right)^2 = ?$

- A.
- $4\frac{2}{3}$
- B.
- $8\frac{1}{6}$
- C.
- $2\frac{2}{3}$
- D.
- $5\frac{4}{9}$
- E. none of these

8. If a car travels $\frac{5}{6}$ of a mile in 1 minute, how far will it travel in $4\frac{1}{2}$ minutes?

- A.
- $5\frac{2}{5}$
- miles B.
- $3\frac{3}{4}$
- miles C.
- $7\frac{1}{2}$
- miles
-
- D.
- $2\frac{1}{2}$
- miles E. none of these

9. $\frac{\frac{3}{4}}{1} = ?$

p. 11

- A. 0 B. $1\frac{1}{3}$ C. $\frac{3}{4}$ D. 1 E. none of these

10. $\frac{\frac{3}{5}}{\frac{4}{9}} = ?$

- A. $\frac{1}{2}$ B. $1\frac{1}{2}$ C. 1 D. $1\frac{7}{20}$ E. none of these

11. $\frac{8}{\frac{2}{3}} = ?$

- A. $5\frac{1}{3}$ B. 12 C. $\frac{1}{12}$ D. $\frac{3}{16}$ E. none of these

12. $\frac{\frac{1}{4}}{\frac{9}{16}} = ?$

- A. $1\frac{4}{13}$ B. $\frac{17}{36}$ C. $\frac{9}{64}$ D. $\frac{4}{9}$ E. none of these

13. $\frac{2}{3} \div \frac{8}{15} = ?$

- A. 1 B. $1\frac{2}{5}$ C. $1\frac{1}{4}$ D. $\frac{28}{45}$ E. none of these

14. A recipe calls for $\frac{3}{4}$ cup of sugar. How many times can this recipe be made using a bag of sugar that contains $7\frac{1}{2}$ cups?

15. A merchant advertises a sale of $\frac{1}{3}$ off. How much is the price reduced for a lamp priced at \$117 before the sale?

16. A carpenter trims $\frac{5}{8}$ inch from a board that is $4\frac{1}{4}$ inches long. What is the new length?

17. A food processor packs $\frac{7}{8}$ oz of gravy mix in a package. How many packages can be filled from $7\frac{1}{4}$ ounces of the mix?

18. During the last month the stock of a company rose from $58\frac{3}{8}$ to $72\frac{3}{16}$. How much was the rise?

p. 12

A number is divisible by 2 if the unit's place is even.

A number is divisible by 3 if the sum of the digits is divisible by 3.

A number is divisible by 4 if the last two digits in the number are divisible by 4.

A number is divisible by 5 if the unit's place is a 5 or 0.

A number is divisible by 6 if it is divisible by 2 and by 3.

A number is divisible by 8 if the last three digits are divisible by 8.

A number is divisible by 9 if the sum of the digits is divisible by 9.

A number is divisible by 10 if the unit's place is 0.

A number is divisible by 11 by using the following rule:

Example: Is 96459 divisible by 11?

1. Underline every other number in 96459. $9 \ 6 \ \underline{4} \ 5 \ \underline{9}$.
2. Add the numbers that are underlined. $9 + 4 + 9 = 22$
3. Add the numbers that are not underlined. $6 + 5 = 11$
4. Subtract the two sums. $22 - 11 = 11$
5. Is the difference found in step 4 divisible by 11?

If yes, then 96459 is divisible by 11.

If no, then 96459 is not divisible by 11.

Since $22 - 11$ is divisible by 11, then 96459 is divisible by 11.

Note: $11 \times 8769 = 96459$.

DIVISIBILITY TESTS

p. 13

Place a check in the square if the number is divisible by the indicated number.

Number	By 2	By 3	By 4	By 5	By 6	By 8	By 9	By 10	By 11
150									
220									
487									
10008									
20790									
264									
134									
1430									
399									
266									
2706									
221									
20008									
1008									

Answers:

DIVISIBILITY TESTS

Place a check in the square if the number is divisible by the indicated number.

Number	By 2	By 3	By 4	By 5	By 6	By 8	By 9	By 10	By 11
150	✓	✓		✓	✓			✓	
220	✓		✓	✓				✓	✓
487									
10008	✓	✓	✓		✓	✓	✓		
20790	✓	✓		✓	✓		✓	✓	✓
264	✓	✓	✓		✓	✓			✓
134	✓								
1430	✓			✓				✓	✓
399		✓							
266	✓								
2706	✓	✓			✓				✓
221									
20008	✓		✓			✓			
1008	✓	✓	✓		✓	✓	✓		

A prime number is a whole number greater than 1 that has only 1 and itself as factors.

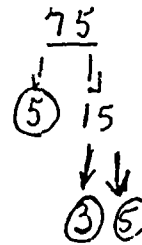
Examples of prime numbers are 11, 37, 2, 5, and 19.

A whole number greater than 1 that is not a prime is called a composite number.

Examples of composite numbers are 52, 15, 32, and 9.

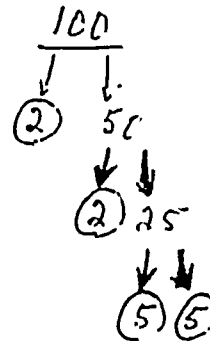
The prime factorization of a whole number is the expression of the number as a product of prime numbers.

Find the prime factorization of 75.



$$75 = 3 \times 5^2$$

Find the prime factorization of 100.



$$100 = 2^2 \times 5^2$$

Find the least common multiple of 75 and 100.

Find the greatest common factor of 75 and 100.

75	3	5	5		
100		5	5	2	2

$$L. C. M. = 3 \times 5 \times 5 \times 2 \times 2 = 300$$

$$G. C. F. = 5 \times 5 = 25$$

PRIME FACTORIZATION

1. Find the prime factorization of each:

- a. 48 _____
- b. 42 _____
- c. 50 _____
- d. 848 _____
- e. 468 _____
- f. 36 _____
- g. 563 _____
- h. 225 _____

2. Find the least common multiple of :

- a. 12 and 20 _____
- b. 20 and 18 _____
- c. 5 and 15 _____
- d. 42 and 28 _____
- e. 225 and 50 _____
- f. 36 and 42 _____
- g. 48 and 80 _____

3. Find the greatest common factor of:

- a. 12 and 20 _____
- b. 20 and 18 _____
- c. 5 and 15 _____
- d. 42 and 28 _____
- e. 225 and 50 _____
- f. 36 and 42 _____
- g. 48 and 80 _____

4. The LCD of $\frac{5}{6}$ and $\frac{5}{8}$ is _____ ? _____.

- A. 32 B. 18 C. 24 D. 48 E. none of these

5. The LCD of $\frac{1}{63}$ and $\frac{5}{72}$ is _____ ? _____ . 55

- A. 168 B. 504 C. 378 D. 4,536 E. none of these

1. Find the prime factorization of each:

a. 48 $3^1 \times 2^4$

b. 42 $2 \times 3 \times 7$

c. 50 2×5^2

d. 848 $2^4 \times 53$

e. 468 $2^2 \times 3^2 \times 13$

f. 36 $2^2 \times 3^2$

g. 563 Prime

h. 225 $3^2 \times 5^2$

2. Find the least common multiple of:

a. 12 and 20 $2 \times 2 \times 3 \times 5 = 60$

b. 20 and 18 $2 \times 2 \times 3 \times 5 \times 3 = 180$

c. 5 and 15 $3 \times 5 = 15$

d. 42 and 28 $2 \times 3 \times 7 \times 2 = 84$

e. 225 and 50 $5^2 \times 3^2 \times 2 = 450$

f. 36 and 42 $2 \times 2 \times 3 \times 3 \times 7 = 252$

g. 48 and 80 $2^4 \times 3 \times 5 = 240$

3. Find the greatest common factor of:

a. 12 and 20 $2 \times 2 = 4$

b. 20 and 18 2

c. 5 and 15 3

d. 42 and 28 $2 \times 7 = 14$

e. 225 and 50 $5^2 = 25$

f. 36 and 42 $2 \times 3 = 6$

g. 48 and 80 $2^4 = 16$

4. The LCD of $\frac{5}{6}$ and $\frac{5}{8}$ is ?.

- A. 32 B. 18 **C. 24** D. 48 E. none of these

5. The LCD of $\frac{1}{63}$ and $\frac{5}{72}$ is ?.

- A. 168 **B. 504** C. 378 D. 4,536 E. none of these

56

REDUCTION OF FRACTION TO LOWEST TERMS

1. Change $\frac{42}{5}$ to a mixed numeral.
 A. $7\frac{2}{5}$ B. $8\frac{2}{5}$ C. $8\frac{1}{5}$ D. $9\frac{2}{5}$ E. none of these
2. Reduce to lowest terms: $\frac{36}{48}$
 A. $\frac{3}{4}$ B. $\frac{9}{12}$ C. $\frac{18}{24}$ D. $\frac{33}{28}$ E. none of these
3. Which of the following fractions can not be reduced?
 A. $\frac{8}{12}$ B. $\frac{24}{26}$ C. $\frac{13}{39}$ D. $\frac{15}{26}$ E. $\frac{12}{27}$
4. Which of the following is not in lowest terms?
 A. $\frac{11}{37}$ B. $\frac{3}{5}$ C. $\frac{19}{57}$ D. $\frac{1}{16}$ E. all are in lowest terms
5. In lowest terms, $\frac{46}{78} = ?$
 A. $\frac{2}{3}$ B. $\frac{23}{39}$ C. $\frac{3}{7}$ D. $\frac{2}{9}$ E. none of these
6. In lowest terms, $\frac{60}{96} = ?$
 A. $\frac{30}{48}$ B. $\frac{15}{24}$ C. $\frac{5}{6}$ D. $\frac{5}{8}$ E. none of these
7. In lowest terms, $\frac{7}{84} = ?$
 A. $\frac{7}{84}$ B. $\frac{1}{13}$ C. $\frac{1}{12}$ D. $\frac{14}{168}$ E. none of these
8. As a mixed numeral with the fraction in lowest terms, $\frac{70}{6} = ?$
 A. $11\frac{2}{3}$ B. $10\frac{2}{3}$ C. $11\frac{1}{3}$ D. $11\frac{1}{6}$ E. none of these

Answers:

1. B 2. A 3. D 4. C 5. B 6. D 7. C 8. A

ADDITION AND SUBTRACTION OF FRACTIONS

p. 21c

1. $\frac{3}{8} + \frac{3}{8} = ?$

- A. $1\frac{1}{8}$ B. $\frac{3}{8}$ C. $\frac{3}{4}$ D. $\frac{9}{16}$ E. none of these

2. $3\frac{3}{8} + \frac{7}{8} = ?$

- A. $2\frac{3}{4}$ B. $4\frac{1}{4}$ C. $1\frac{1}{4}$ D. $3\frac{1}{4}$ E. none of these

3. $7\frac{3}{8} - 2\frac{7}{8} = ?$

- A. $4\frac{1}{2}$ B. $5\frac{1}{2}$ C. $4\frac{3}{8}$ D. $4\frac{1}{4}$ E. none of these

4. $\frac{5}{6} - \frac{1}{6} = ?$

- A. $\frac{2}{3}$ B. 1 C. $\frac{4}{6}$ D. 0 E. none of these

5. $\frac{7}{8} + \frac{1}{6} = ?$

- A. $\frac{4}{7}$ B. $\frac{5}{6}$ C. 1 D. $1\frac{1}{24}$ E. none of these

6. $1\frac{2}{9} + 5\frac{3}{4} = ?$

- A. $6\frac{35}{36}$ B. $6\frac{8}{13}$ C. $\frac{1}{3}$ D. $2\frac{8}{13}$ E. none of these

7. $\frac{7}{8} - \frac{1}{4} = ?$

- A. $1\frac{1}{2}$ B. $\frac{1}{4}$ C. $\frac{1}{8}$ D. $\frac{5}{6}$ E. none of these

8. $11\frac{3}{8} - 2\frac{5}{8} = ?$

- A. $8\frac{1}{2}$ B. $8\frac{3}{8}$ C. $8\frac{1}{4}$ D. $9\frac{3}{8}$ E. none of these

9.

The largest fraction from the group $\frac{5}{12}$, $\frac{3}{8}$, $\frac{1}{4}$, $\frac{3}{4}$ is _____?

- A. $\frac{5}{12}$ B. $\frac{3}{8}$ C. $\frac{1}{4}$ D. $\frac{3}{4}$

Answers:

p. 22.
PERCENT

The word percent means "per hundred".

Percent	Meaning	Fraction	Decimal Number
27%	27 per hundred	27/100	.27
9%	9 per hundred	9/100	.09
189%	189 per hundred	189/100	189.%

To change a percent to a decimal number, drop the % sign and move the decimal point two places to the left.

To change a decimal number to a percent, move the decimal point two places to the right and attach a % symbol.

Suppose you are to be given a raise of 6% of your present salary of \$300 per week. How can you calculate your dollar raise? You must find 6% of \$300. Remember that the word of usually means to multiply. Change 6% to .06 or to 6/100.

$$\text{Dollar raise} = .06 \times 300 = 18$$

$$\text{Salary after the raise} = \$300 + \$18 = \$318$$

$$\text{Cost} + \text{Profit} = \text{Selling Price}$$

$$\text{Profit} = (\text{Rate of Profit}) \times (\text{Cost})$$

$$\text{Commission} = (\text{Rate of Commission}) \times (\text{Selling Price})$$

PERCENT

p. 23.

1. Express .32 as a percent.
 A. .32% B. 32% C. 320% D. 3.2% E. none of these
2. Express .07 as a percent.
 A. 7% B. .07% C. .007% D. .7% E. none of these
3. Express $\frac{36}{100}$ as a percent.
 A. .36% B. 9% C. 36% D. 3.6% E. none of these
4. Express $\frac{6}{25}$ as a percent.
 A. 60% B. 6% C. 24% D. .06% E. none of these
5. Express $\frac{18}{300}$ as a percent.
 A. 3% B. 6% C. 18% D. 30% E. none of these
6. Express $\frac{3}{7}$ as a percent.
 A. 3% B. 7% C. $\frac{3}{7}\%$ D. $42\frac{6}{7}\%$ E. none of these
7. $\frac{2}{7}$ rounded to the nearest whole percent is.
 A. 42.8% B. 42% C. 43% D. 42.9% E. none of these
8. Which of the following is false?
 A. .42 = 42% B. .04 = 4% C. 3.7 = 370%
 D. .5 = $\frac{1}{2}\%$ E. .001 = .1%
9. Which of the following is false?
 A. $\frac{4}{25} = 16\%$ B. $\frac{3}{200} = 15\%$ C. $\frac{7}{20} = 35\%$ D. $\frac{1}{5} = 20\%$
 E. $\frac{21}{300} = 7\%$
10. 20% expressed as a fraction in lowest terms is:
 A. $\frac{20}{1}$ B. $\frac{1}{5}$ C. $\frac{2}{10}$ D. $\frac{20}{100}$ E. none of these
11. 190% expressed as a mixed numeral in lowest terms is:
 A. $\frac{100}{190}$ B. $\frac{10}{19}$ C. $1\frac{9}{10}$ D. $1\frac{90}{100}$ E. none of these

600% is equivalent to:

60

- A. .6 B. 6 C. 60 D. 600

24.
13. $3\frac{1}{3}\%$ changed to a fraction in lowest terms is:
A. $\frac{1}{30}$ B. $\frac{10}{300}$ C. $\frac{3}{10}$ D. $3\frac{1}{3}$ E. none of these
14. $\frac{1}{4}\%$ changed to a fraction in lowest terms is:
A. $\frac{1}{400}$ B. $\frac{1}{4}$ C. 25% D. 40% E. none of these
15. 18% changed to a decimal is:
A. 1.8 B. .18 C. 180 D. .018 E. none of these
16. $3\frac{1}{4}\%$ changed to a decimal is:
A. 3.25 B. 32.5 C. .0325 D. 325 E. none of these
17. $66\frac{2}{3}\%$ is equivalent to:
A. $66\frac{2}{3}$ B. $\frac{1}{3}$ C. $\frac{2}{3}$ D. $\frac{1}{6}$ E. none of these
18. The mixed numeral equivalent to 140% is:
A. $1\frac{2}{5}$ B. $1\frac{4}{5}$ C. $1\frac{1}{5}$ D. $\frac{5}{7}$ E. none of these
19. $1\frac{1}{4}\%$ of 45 =
A. 5.625 B. 56.25 C. 562.5 D. .5625 E. none of these
20. $66\frac{2}{3}\%$ of 54 =
A. 81 B. 36.18 C. 35.64 D. 36 E. none of these
21. 130% of 18 =
A. 23.4 B. 234 C. 2.34 D. .234 E. none of these
22. 24% of \$80 =
A. \$.192 B. \$1.92 C. \$19.20 D. \$192.00 E. none of these
23. 70% of what number is 84?
A. 58.8 B. 12 C. 120 D. $\frac{1}{12}$ E. none of these
24. 320% of what number is 160?
A. 500 B. 50 C. 512 D. .5 E. none of these
25. What percent of 24 is 8? 61
A. 3% B. $33\frac{1}{3}\%$ C. 300% D. 30% E. none of these

26. What percent of 7 is 5? (To nearest whole percent)
 A. 35% B. 140% C. 72% D. 71% E. none of these
27. What percent of 25 is 3?
 A. 12% B. 3% C. $8\frac{1}{3}\%$ D. 15% E. none of these
28. Find the amount of increase if the original amount is \$960 and the rate of increase is 12%.
 A. \$115.20 B. \$1,075.20 C. 88% D. \$844.80 E. none of these
29. What is the rate of profit on a dishwasher selling for \$240 if the cost price was \$200?
 A. 17% B. 5% C. 20% D. 6% E. none of these
30. What is the selling price of a refrigerator which costs \$360 the rate of profit is 15%?
 A. \$54 B. \$306 C. \$24 D. \$414 E. none of the
31. Find the rate of profit on an article if the profit was \$12 and the selling price was \$72.
 A. 20% B. 51% C. 5% D. 505% E. none of thes
32. Find the commission on the sale of a \$90,000 home if the realtor charges 6%.
 A. \$5,400 B. \$1,500 C. \$8,460 D. \$846
 E. none of these
33. If the commission on a sale of \$900 is \$99, find the rate of commission.
 A. 9% B. 11% C. 14% D. 22.5%
 E. none of these
34. Mrs. Smith bought an antique plate for \$400 and sold it for \$468. What was the rate of increase?
 A. 17% B. 34% C. 68% D. \$14.53 E. none of these
35. A used car dealer bought a car for \$1,500 and increased the price 15%. What is the new price?
 A. \$975 B. \$225 C. \$1,725 D. \$2,250 E. none of these

p. 20

36. A school which had an enrollment of 2800 students this year, expects to have a decrease of 8% next year. What will be the amount of this decrease?
- A. 350 B. 224 C. 2576 D. 336 E. none of these
37. In a class of 40 students, 20% were absent. How many students were present?
- A. 38 B. 36 C. 8 D. 32 E. none of these
38. A desk now sells for \$320. The seller claims that this was a reduction of 20% from the original price. What was the original price?
- A. \$400 B. \$64 C. \$384 D. \$256 E. none of these
39. The price of a car was \$7,200. If this price was decreased by 18%, find the new price.
- A. \$4,000 B. \$1,296 C. \$5,904 D. 82% E. none of these
40. A bicycle which once sold for \$280 is now priced at \$224. Find the rate of decrease.
- A. 80% B. 25% C. 20% D. 12.5% E. none of these
41. A table used to sell for \$540. If the price was decreased by a rate of 25%, find the amount of decrease.
- A. \$21.60 B. \$216 C. \$405 D. \$135 E. none of these
42. The population of a town in 1970 was 27,000. The population increased 30% in the next five years. Find the amount of increase.
- A. 3,510 B. 8,100 C. 18,900 D. 35,100 E. none of these
43. Between 1960 and 1970 a city increased its population by 85%. If its population in 1970 was 55,500, find its population in 1960.
- A. 102,674 B. 47,174 C. 30,000 D. 8,324 E. none of these
44. In 1975 a factory produced 120 radios. In 1976 it produced 420 radios. Find the rate of increase.
- A. 350% B. 28.6% C. 71.4% D. 250% E. none of these
45. A school had 3,500 students one year and 4,375 students the next year. Find the rate of increase.
- A. 80% B. 20% C. 25% D. 125% E. none of these

Answers:

- | | |
|-------|-------|
| 1. B | 25. B |
| 2. A | 26. D |
| 3. C | 27. A |
| 4. C | 28. A |
| 5. B | 29. C |
| 6. D | 30. D |
| 7. E | 31. A |
| 8. D | 32. A |
| 9. B | 33. B |
| 10. B | 34. A |
| 11. C | 35. C |
| 12. B | 36. B |
| 13. A | 37. D |
| 14. A | 38. A |
| 15. B | 39. C |
| 16. C | 40. C |
| 17. C | 41. D |
| 18. A | 42. B |
| 19. D | 43. C |
| 20. D | 44. D |
| 21. A | 45. C |
| 22. C | |
| 23. C | |
| 24. B | |

Rules For Adding Signed Numbers

Rule 1: If both signs are positive, ^{ignore signs} add the numbers and give your answer a positive sign.

Example: $(+4) + (+5) = +9$

Rule 2: If both signs are negative, ^{ignore signs} add the numbers and give your answer a negative sign.

Example: $(-4) + (-3) = -7$ ^{ignore signs}

Rule 3: If the signs are opposite, subtract the smaller from the larger and give your answer the sign of the larger.

Example: $(-17) + (+5)$

step 1:
THINK: →

Larger is 17 and the smaller is 5
 $17 - 5 = 12$

step 2:
THINK: ANSWER
IS NEGATIVE

step 3: THINK: $(-17) + (+5) = -12$

Rule for Subtracting Signed Numbers

Change the sign of the subtrahend (the number on the right, being subtracted from the other) and add.

Example: $(-7) - (-7) = (-7) + (+7) = 0$

Example: $(-5) - (+3) = (-5) + (-3) = -8$

Example: $(32) - (-5) = (32) + (+5) = 37$

Rules for Multiplying Signed Numbers

Ignore the signs and multiply like numbers of arithmetic.

Rule 1: If both numbers have the same sign (both positive or both negative), the product is positive.

Example: $(+4)(+5) = +20$

like signs have a positive product!

Example: $(-7)(-3) = +21$

Rule 2: If the signs are opposite (one positive and the other negative), the product is negative.

Example: $(-4)(+5) = -20$

Example: $(+8)(-4) = -32$

Unlike signs have a negative product!

Rule 3: If one or both numbers is zero, the product is zero.

Rules for Dividing Signed Numbers

Ignore the signs and divide like numbers of arithmetic.

Rule 1: If both numbers have the same sign (both positive or both negative), the quotient is positive.

Example: $\frac{+6}{+2} = +3$

like signs have a positive quotient!

Example: $\frac{-18}{-3} = +6$

Rule 2: If the signs are opposite (one positive and the other negative), the quotient is negative.

Example: $\frac{-36}{6} = -6$

Unlike signs have a negative quotient!

Perform the indicated operations.

1. $(+45) + (-30) =$ _____

2. $(-56) + (-40) =$ _____

3. $(-4) - (-6) =$ _____

4. $-(-55) =$ _____

5. $(+7) - (-6) =$ _____

6. $(-7)(-4) =$ _____

7. $(-5)(+5) =$ _____

8. $\frac{-40}{+5} =$ _____

9. $(-6)(-3) =$ _____

10. $(-8) - (-12) =$ _____

11. $(-5)(-7) =$ _____

12. $- (+7) =$ _____

13. $-(-8) - (+5) =$ _____

14. $(+5)(-7)(-2) =$ _____

15. $(-1)^{14} =$ _____

16. $(+8) + (-4) =$ _____

17. $(-63) + (-37) =$ _____

18. $\frac{+24}{-6} =$ _____

19. $\frac{-72}{-12} =$ _____

20. $(-7)(-3)(-1) =$ _____

21. $(-1)^{43} =$ _____

22. $(75) - (60) =$ _____

23. $(-5) - (-7) =$ _____

24. $(-5)(-4) =$ _____

25. $-(-6) - (-30) =$ _____

26. $(-73) + (-2) =$ _____

27. $\frac{-56}{+8} =$ _____

SIGNED NUMBERS

Give the value of each.

1. $(2) + (-5)$ _____
2. $(-3) + (-4)$ _____
3. $(-18) + (+ 32)$ _____
4. $(+ 50) + (-24)$ _____
5. $8 - (2)$ _____
6. $(-7) - (-3)$ _____
7. $(60) - (-50)$ _____
8. $52 + (-3) - (-8)$ _____
9. $- (-4)$ _____
10. $(-9)(-6)$ _____
11. $(6)(-7)$ _____
12. $(-3)(-6)(-3)$ _____
13. $(-3)^2$ _____
14. $(-2)(4)(-1)(-2)$ _____
15. $9 - (-3)$ _____
16. $(-8) - (-5)$ _____
17. $\frac{-8}{-4}$ _____
18. $\frac{-65}{5}$ _____
19. $\frac{-36}{(-2)(-3)}$ _____
20. $(-2)^2$ _____
21. $(-1)^{12}$ _____
22. $(-1)^9$ _____
23. $(-27) - (+35)$ _____
24. $(-2)(-3)(-5)(-1)$ _____
25. $\frac{(-6)(-8)}{(-4)(3)}$ _____

Answers:

Perform the indicated operations.

1. $(+45) + (-30) = \underline{15}$

2. $(-56) + (-40) = \underline{-96}$

3. $(-4) - (-6) = \underline{2}$

4. $-(-55) = \underline{55}$

5. $(+7) - (-6) = \underline{13}$

6. $(-7)(-4) = \underline{28}$

7. $(-5)(+5) = \underline{-25}$

8. $\frac{-40}{+5} = \underline{-8}$

9. $(-6)(-3) = \underline{+18}$

10. $(-8) - (-12) = \underline{4}$

11. $(-5)(-7) = \underline{35}$

12. $- (+7) = \underline{-7}$

13. $-(-8) - (+5) = \underline{3}$

14. $(+5)(-7)(-2) = \underline{70}$

15. $(-1)^{14} = \underline{1}$

16. $(+8) + (-4) = \underline{4}$

17. $(-63) + (-37) = \underline{-100}$

18. $\frac{+24}{-6} = \underline{-4}$

19. $\frac{-72}{-12} = \underline{6}$

20. $(-7)(-3)(-1) = \underline{-21}$

21. $(-1)^{43} = \underline{-1}$

22. $(75) - (60) = \underline{15}$

23. $(-5) - (-7) = \underline{2}$

24. $(-5)(-4) = \underline{20}$

25. $-(-6) - (-30) = \underline{36}$

26. $(-73) + (-2) = \underline{-75}$

27. $\frac{-56}{+8} = \underline{-7}$

Give the value of each.

1. $(2) + (-5) = \underline{-3}$

2. $(-3) + (-4) = \underline{-7}$

3. $(-18) + (+32) = \underline{14}$

4. $(+50) + (-24) = \underline{26}$

5. $8 - (2) = \underline{6}$

6. $(-7) - (-3) = \underline{-4}$

7. $(60) - (-50) = \underline{110}$

8. $52 + (-3) - (-8) = \underline{57}$

9. $-(-4) = \underline{4}$

10. $(-9)(-6) = \underline{54}$

11. $(6)(-7) = \underline{-42}$

12. $(-3)(-6)(-3) = \underline{-54}$

13. $(-3)^2 = \underline{9}$

14. $(-2)(4)(-1)(-2) = \underline{-16}$

15. $9 - (-3) = \underline{12}$

16. $(-8) - (-5) = \underline{-3}$

17. $\frac{-8}{-4} = \underline{2}$

18. $\frac{-65}{5} = \underline{-13}$

19. $\frac{-36}{(-2)(-3)} = \underline{-6}$

20. $(-2)^2 = \underline{4}$

21. $(-1)^{12} = \underline{1}$

22. $(-1)^9 = \underline{-1}$

23. $(-27) - (+35) = \underline{-62}$

24. $(-2)(-3)(-5)(-1) = \underline{30}$

25. $\frac{(-6)(-8)}{(-4)(3)} = \underline{-4}$

Finding the Value of an Expression

Find the value of each expression for the variable given.

1. $3x-5$ if $x = -2$ _____

2. $x^2 + 3x - 7$ if $x = 5$ _____

3. $x^2 + 5x + 3$ if $x = -2$ _____

4. $4x^3 + x^2$ if $x = -2$ _____

5. $3x^2 - xy + 2y^2$ if $x=3$ and $y = 2$ _____

6. $5x^2 - 7yz + 4xy^2$ if $x = -2, y = 3,$ and $z = -1.$ _____

7. $(3x)^2 + 4x^2$ if $x = 2$ _____

8. $2a^2b + 3ab^2 - ab$ if $a=2$ and $b=3$ _____

9. $2(y-9)$ if $y = -2$ _____

10. $\frac{35}{n}$ if $n = -7$ _____

11. $x + 4$ if $x = -7$ _____

12. $3x^2$ if $x = -3$ _____

13. $(2x)^2$ if $x = -5$ _____

14. $\frac{x-7}{2}$ if $x = -3$ _____

15. $2x + 3y$ if $x = -3$ and $y = -7$ _____

16. $\frac{1}{2}(4y-10z)$ if $y= 9$ and $z= 2$ _____

17. $\frac{5(f-32)}{9}$ if $f= 104$ _____

18. $x^2 - 3x$ if $x = -2$ _____

19. $7x^3$ if $x = -2$ _____

20. $5x + 3y - 2$ if $x = 3$ and $y = -2$ _____

Combine like terms.

1. $3x - 9x + 5x$ _____
2. $7x - 8x + 2y + 7y$ _____
3. $3 - 3y + 5p - 4t$ _____
4. $13 - 2y + 7y$ _____
5. $9x - 5y + 18z - 2x + 5y - 24z$ _____
6. $6x - 2(4x)$ _____
7. $5(x-y) + 3x + 2y$ _____
8. $-2(7x) + 18x$ _____
9. $10(3-2x) - 2(5+2x)$ _____
10. $5(-3h - 2y) - h - y$ _____
11. $-(2w - 4t) + 3(2w - 3t)$ _____
12. $(7a - 3y) + (2a + 6y)$ _____
13. $(4x - 6y) - (14x - 5y)$ _____
14. $2(x-3) - 5(2x+4)$ _____
15. $(-10x + 3y) + 4(8x - 2y)$ _____
16. $-5(2t - 3y + 5) + 2(3t - 2y - 7)$ _____
17. $3 [2x - 3(x-5)]$ _____
18. $4(x-2) + 3(3x+5)$ _____
19. $6 [(3x-2y) + 2(5x+y)]$ _____
20. $- [5x - 5(x-4)] - 5 [2(x-2) - 2x]$ _____
21. $x^2 + 2x - 3 + 4x^2 - 8x - 5$ _____
22. $3x^3 + 2x^2 - 9x + 5x^3 - 4x^2 - 7x$ _____
23. $2(x^2 + 2) - 3(x^2 - 4x + 5)$ _____
24. $x^5 + 2x^3 + x^2 - 3x + 2x^5 - 7x^3 + 4x^2 - 7x$ _____
25. $-2(x^2 + 2x - 3) - (9x^2 + 4x + 2)$ _____

EQUATIONS

Solve and check:

1. $x - 8 = 5$ _____
2. $-5 + x = 4$ _____
3. $x + 15 = 6$ _____
4. $3x = -33$ _____
5. $-2x = 44$ _____
6. $9x = 54$ _____
7. $x - 9 = -23$ _____
8. $\frac{x}{6} = 8$ _____
9. $-7x = 14$ _____
10. $-5x = -45$ _____
11. $4x + 7 = 19$ _____
12. $3x - 6 = 24$ _____
13. $7x + 4 = -17$ _____
14. $14 + 7x = 0$ _____
15. $6x + 13 = 13$ _____
16. $9 - 3x = 36$ _____
17. $(x + 4) + (x - 7) = 9$ _____
18. $3(x - 6) - (2x + 5) = -16$ _____
19. $11 = 5(x - 3) + 6$ _____
20. $10 = 2(x - 5) - 5(x + 2)$ _____
21. $\frac{x}{5} + 7 = 15$ _____
22. $8x + 3 = 5x - 24$ _____
23. $-4x + 15 = 3x - 6$ _____
24. $2(5x - 1) - 5 = 3(7 + x)$ _____
25. $3[x + 5(x + 1)] = 7(x - 4) + 10$ _____
26. $8[-x + 2(x + 1)] = -2(1 + 3x) - 10$ _____

ANSWERS

Finding the Value

1. -11
2. 33
3. -3
4. -28
5. 29
6. -31
7. 52
8. 72
9. -22
10. -5
11. -3
12. 27
13. 100
14. -5
15. -27
16. 8
17. 40
18. 10
19. -56
20. 7

Like Terms

1. $-x$
2. $-x + 9y$
3. Simplified
4. $13 + 5y$
5. $7x - 6z$
6. $-2x$
7. $8x - 3y$
8. $4x$
9. $20 - 24x$
10. $-16h - 11y$
11. $4w - 5t$
12. $9a + 3y$
13. $-10x - y$
14. $-8x - 26$
15. $22x - 5y$
16. $-4t + 11y - 39$
17. $-3x + 45$
18. $13x + 7$
19. $78x$
20. 0
21. $5x^2 - 6x - 8$
22. $8x^3 - 2x^2 - 16x$
23. $-7x^2 + 12x - 11$
24. $3x^5 - 5x^3 + 5x^2 - 10x$
25. $-11x^2 - 8x + 4$

Equations

1. $x = 13$
2. $x = 9$
3. $x = -9$
4. $x = -11$
5. $x = -22$
6. $x = 6$
7. $x = -14$
8. $x = 48$
9. $x = -2$
10. $x = 9$
11. $x = 3$
12. $x = 10$
13. $x = -3$
14. $x = -2$
15. $x = 0$
16. $x = -9$
17. $x = 6$
18. $x = 7$
19. $x = 4$
20. $x = -10$
21. $x = 40$
22. $x = -9$
23. $x = 3$
24. $x = 4$
25. $x = -3$
26. $x = -2$

EXPONENTS

Unless parentheses indicate otherwise, an exponent belongs only with the number to which it is attached.

$$2 x^3 = 2 \cdot x \cdot x \cdot x$$

$$(2x)^3 = 2x \cdot 2x \cdot 2x$$

One As An Exponent

$$x = x^1$$

Zero As An Exponent

$$x^0 = 1 \text{ provided that } x \neq 0$$

To multiply powers of the same base, keep the same base and add the exponents.

$$x^p x^a = x^{p+a}$$

To raise a power to a power, keep the base and multiply the exponents.

$$(x^p)^a = x^{p \cdot a}$$

To raise a product to a power, raise each factor to that power.

$$(xy)^p = x^p y^p$$

To divide powers of the same base, keep the same base and subtract the exponents.

$$\frac{x^p}{x^a} = x^{p-a}$$

EXPONENTS

Simplify.

- _____ 1. $x^5 \cdot x^3$
- _____ 2. $(4x^3)(7x^5)$
- _____ 3. $(-9x^5)(5x)$
- _____ 4. $(10x^4)(2x)$
- _____ 5. $(7x^3)(-x)(-3x^2)$
- _____ 6. $(5xy^2)(2x^2y)$
- _____ 7. $(x^2)^3$
- _____ 8. $(9y^2)^2$
- _____ 9. $(-3x)^3$
- _____ 10. $(x^4y^2)^3$
- _____ 11. $(-3xy^2)^2 (2x^3y^2)^3$
- _____ 12. $ab^3(7a^5b^4) - 6a^4b^2(a^2b^5)$
- _____ 13. $x^2(2x^2 - 3x)$
- _____ 14. $3x^5(2x - 5x^2)$
- _____ 15. $x^2(3y - 8) + 2x^2(4y + 6)$
- _____ 16. $-5x^3(3x^2 - 4x + 2)$
- _____ 17. $\frac{x^6}{x^2}$
- _____ 18. $\frac{x^4 y^9}{x^3 y^7}$
- _____ 19. $\frac{39 x^7 y^{11}}{63 x^5 y^7}$
- _____ 20. $\frac{(4 x^3 y^2)^2}{(-2x^2y)^2}$

Give the value.

1. $(7)(-10) + (12)(-9)$ _____

2. $3\frac{1}{2}6 + 2.5 - 8$ _____

3. $(4)(-3) + (-8)(-2)$ _____

4. $(7)(-6) \div (-2) + 4 - 9$ _____

5. $-3 + 4 - 8 + 6 - (8)(2)$ _____

6. $(-3) + (-6) \div (-2) + 4 - 12$ _____

7. $-3 + 5^2$ _____

8. $(-2)^3 + 3$ _____

9. $\frac{4 + (-6)^2}{-8}$ _____

10. $23 - [3(5+2) - (8-3)]$ _____

11. $7 - 2(-3)$ _____

12. $(7)(-3) - (5)(-2)$ _____

13. $5^2 - 8 + 28 \div 4 \times 7$ _____

14. $(-88)(-56)(0) - (-2)(5)$ _____

15. $3^3 + 8 \div 2 \times 4$ _____

16. $\frac{8^2 + 8}{(-6)(12)}$ _____

17. $\frac{(-4)^2 + 8}{-6}$ _____

18. $8 \div (-2) + 5$ _____

19. $\frac{18 - (-2)}{(-5)(-4)}$ _____

20. $\frac{(-12)(+5)}{15}$ _____

21. $-8 [(-15) \div 3 + 2(7-11)]$ _____

22. $-4(7-10)$ _____

EXPONENTS

1. x^8
2. $28x^8$
3. $-45x^6$
4. $20x^5$
5. $21x^6$
6. $10x^3y^3$
7. x^6
8. $81y^4$
9. $-27x^3$
10. $x^{12}y^6$
11. $72x^{11}y^{10}$
12. a^6b^7
13. $2x^4 - 3x^3$
14. $6x^6 - 15x^7$
15. $11x^2y + 4x^2$
16. $-15x^5 + 20x^4 - 10x^3$
17. x^4
18. x^2y^2
19. $\frac{13}{21}x^2y^4$
20. $4x^2y^2$

ORDER OF OPERATIONS

1. -178
2. -5
3. 4
4. 16
5. -17
6. -8
7. 22
8. -5
9. -5
10. 7
11. 13
12. -11
13. 66
14. 10
15. 43
16. -1
17. -4
18. 1
19. 1
20. -4
21. 104
22. 12

REVIEW

Select the correct answer.

1. Add: $74 + 62 + 58$
 - a. 174
 - b. 284
 - c. 204
 - d. 194
 - e. 184
2. Sub tract: $30,605 - 12,928$
 - a. 27,777
 - b. 18,777
 - c. 17,677
 - d. 17,887
 - e. 17,787
3. Sub tract: $4,000 - 2,037$
 - a. 1,963
 - b. 2,063
 - c. 1,973
 - d. 6,037
 - e. 2,073
4. Write in Numerals: Three hundred thousand, sixty
 - a. 300,600
 - b. 300,060
 - c. 300,60
 - d. 30,060
5. Round 59,936 to the nearest hundred.
 - a. 50,000
 - b. 59,900
 - c. 60,000
 - d. 59,940
6. Which of the following cannot be performed?
 - a. 7×0
 - b. $10 \div 0$
 - c. $0 \div 3$
 - d. 0×0
7. Divide: $6,552 \div 7$
 - a. 936 r1
 - b. 934 r4
 - c. 836
 - d. 846
 - e. 936
8. $5072 \div 8 = ?$
 - a. 634
 - b. 672
 - c. 621 r4
9. 5,142 is evenly divisible by :
 - a. Only 4
 - b. both 3 and 5
 - c. only 3
 - d. both 2 and 3
 - e. only 2
10. Which is false?
 - a. $7.22 \div 100 = .0722$
 - b. $.084 \div 10 = .0084$
 - c. $.508 \div 100 = 50.8$
 - d. $.0707 \div 10 = .00707$
11. Which statement is true?
 - a. $.09 = \frac{9}{10}$
 - b. $.0007 = \frac{7}{10,000}$
 - c. $.007 = \frac{7}{100}$

12. The improper fraction $\frac{709}{1,000}$ may be written:
 a. .0709 b. .709 c. .00709
13. Which inequality symbol should be used in comparing -3 with 5 ?
 a. $>$ b. $<$
14. Which inequality symbol should be used in comparing -8 and -20 ?
 a. $>$ b. $<$
15. Simplify: $5^2 + \frac{9}{3}$
 a. 13 b. 37 c. 31 d. 28
16. Simplify: $3 \cdot 2^4$
 a. 48 b. 6^4 c. 24 d. 11
17. Simplify: $7 + 8 \cdot 2$
 a. 30 b. 23 c. 112
18. If 1.6 of a number is 40, then the number is:
 a. .64 b. .4 c. 2.5 d. 25.
19. Simplify: $\frac{3.6}{.006}$
 a. 60 b. 600 c. 6 d. .6
20. What decimal part of 20 is 25.6?
 a. 10.28 b. .781 c. 1.28 d. 1.33
21. Solve for n : $.2n = 12$
 a. n = 600 b. n = .6 c. n = .06 d. n = 60
22. Change 40% to a common fraction.
 a. $\frac{1}{4}$ b. $\frac{1}{40}$ c. $\frac{2}{5}$ d. $\frac{3}{5}$
23. Change $12\frac{1}{2}\%$ to a common fraction.
 a. $\frac{1}{6}$ b. $\frac{1}{8}$ c. $\frac{1}{12}$ d. $\frac{1}{3}$

24. Find 110% of 40
 a. 44, b. 440, c. 4,400, d. 4.4
25. What percent of 40 is 20?
 a. 50% b. 80% c. 8% d. 20%
26. 25% of what number is 60?
 a. 24 b. 1500 c. 150 d. 240
27. Find $66 \frac{2}{3}$ % of 120.
 a. 180 b. 80 c. 120 d. 90
28. Round 87.572 to one decimal place.
 a. 87.57 b. 87.5 c. 87.6 d. 88.
29. Add: $82.34 + 17.98 = ?$
 a. 100.22 b. 99.22 c. 99.32 d. 100.32
30. Which statement is correct?
 a. $.72 \times 10 = 72$ b. $1,000 \times 82.3 = .0823$
 c. $.0063 \times 100 = .63$ d. $64.8 \times 100 = 648$
31. Divide: $4 \div .8$
 a. 5 b. .5 c. .05 d. .2
32. Divide: $.216 \div .003$
 a. 72 b. 7.2 c. .72 d. .072
33. Find $(.02)^2$
 a. .4 b. .04 c. .004 d. .0004
34. Round off .060606 to 3 decimal places
 a. .060 b. .061 c. 0606
35. Express $\frac{72}{12 \overline{)186}}$ in lowest terms
 a. $\frac{12}{31}$ b. $\frac{36}{93}$ c. $\frac{2}{3}$

36. Which is not in lowest terms?
 a. $\frac{7}{43}$ b. $\frac{5}{29}$ c. $\frac{33}{44}$ d. $\frac{6}{31}$
37. The least common multiple of 8 and 20 is:
 a. 160 b. 120 c. 80 d. 40 e. 20
38. $\frac{7}{8} + \frac{5}{6} = ?$
 a. $1\frac{7}{24}$ b. $1\frac{11}{24}$ c. $1\frac{17}{24}$
39. Subtract: $8\frac{1}{2} - 2\frac{5}{6}$
 a. $5\frac{2}{3}$ b. $5\frac{1}{6}$ c. $5\frac{1}{4}$ d. $5\frac{1}{3}$
40. Multiply: $(1\frac{1}{4})(1\frac{12}{16})$
 a. $1\frac{3}{4}$ b. $1\frac{2}{5}$ c. $2\frac{3}{16}$ d. $1\frac{5}{16}$
41. Find $(1\frac{2}{3})^2$
 a. $1\frac{4}{9}$ b. $2\frac{1}{3}$ c. $2\frac{4}{9}$ d. $2\frac{7}{9}$
42. Multiply: 3.24×6.5
 a. 20.06 b. 21.06 c. 21. d. 210.6
43. Divide: $12 \div .4$
 a. .3 b. 3 c. 30 d. 300
44. Express $\frac{1}{16}$ as a decimal.
 a. .0625 b. .625 c. .0535
45. At one time bread cost 10¢ a loaf. Today it costs 45¢. What was the rate of increase?
 a. $63\frac{7}{11}\%$ b. 250% c. 350% d. $77\frac{7}{9}\%$
46. A merchant wishes to make a 25% profit on the cost price. An article cost him \$32. What should the selling price be?
 a. \$42 b. \$57 c. \$40 d. \$24
47. The rate of profit on a dress was 30% of the cost price. The profit was \$21. What was the cost price?
 a. \$70 b. \$35 c. \$63 d. \$28.57

48. A factory which regularly produced 600 articles per day decreased production by 40%. How many articles is it now processing?
 a. 840 b. 360 c. 460 d. 576
49. A television is on sale for \$400 and is advertised as being 20% off the regular price. What was the regular price?
 a. \$480 b. \$420 c. \$450 d. \$500
50. Find the amount of profit on \$130 if the rate of profit is $8\frac{1}{2}\%$.
 a. \$10.05 b. \$11 c. \$11.05 d. \$10.50
51. A merchant wishes to make a 25% profit on the cost price. An article cost him \$51.32. What should the selling price be?
 a. \$12.83 b. \$64.15 c. \$38.49 d. \$12.17
 e. \$76.32
52. The rate of profit based on the cost price on a dress was 20%. The profit was \$30. What was the selling price?
 a. \$6.00 b. \$60 c. \$50 d. \$180 e. \$66.67
53. If the original price was \$75 and the new price is \$50, find the rate of decrease.
 a. $33\frac{1}{3}\%$ b. 50% c. 150% d. 25% e. $133\frac{1}{3}\%$
54. If the original price was \$20 and the new price is \$15, find the rate of decrease.
 a. 25% b. 20% c. 22% d. 50% e. $33\frac{1}{3}\%$
55. Express $\frac{24}{300}$ as a percent.
 a. .8% b. 8% c. 6% d. 2.4%
56. Convert $3\frac{1}{5}$ to a percent.
 a. 310% b. $3\frac{1}{5}\%$ c. 320% d. .32%
57. Find 110% of 18.
 a. 198 b. 18 c. 19.8 d. 1.98
58. What percent of 25 is 600?
 a. 240% b. 24% c. 2,400% d. 600%
59. 20% of what number is 80?
 a. 400 b. 4 c. .0025 d. 40

p. 46

60. $\frac{3}{4} \div \frac{5}{6} = ?$

- a. $\frac{15}{24}$ b. $\frac{3}{5}$ c. $1\frac{1}{9}$ d. $\frac{9}{10}$

61. Multiply: $\frac{2}{5} \times \frac{3}{4} \times \frac{25}{36} = ?$

- a. $\frac{5}{24}$ b. $\frac{5}{8}$ c. $\frac{7}{16}$ d. $\frac{3}{8}$

62. The place value of the digit 7 in 10.0675 is:

- a. tenths b. hundredths c. thousandths
d. ten-thousandths

63. $8 \times \frac{3}{4} = ?$

- a. 5 b. 6 c. 7 d. 4

64. Is the number 172008 divisible by 8 ?

- a. Yes b. No

65. Is the number 300510000. divisible by 9?

- a. Yes b. No

66. Find the prime factorization of 72.

- a. 8×9 b. $2^2 \times 3^3$ c. $2^3 \times 3^3$ d. $2^3 \times 3^2$

67. Find: $(+8) + (-2)$

- a. 10 b. -10 c. 6 d. -6

68. Find: $(-3) - (-2)$

- a. -1 b. -5 c. +5 d. +1

69. Find $\frac{-18}{-2}$

- a. +9 b. -9

70. Find $(-1)^5$

- a. +1 b. -1

71. Find $(-13)(-1)(-2)$

- a. 26 b. -26

72. Find the value of $5X - 2$ if $X = -3$
 a. -15 b. -17 c. -13
73. Find the value of $2X^3$ if $X = -2$
 a. -16 b. 16
74. Find the value of $(2X)^2$ if $X = -5$
 a. 100 b. -100 c. 50 d. -50
75. Find the value of $2X + 5y$ if $X = -3$ and $y = 2$
 a. -60 b. -16 c. 4
76. Find the value of $X^2 + Xy$ if $X = -2$ and $y = -3$
 a. 2 b. 10 c. -2
77. Find: $(\frac{4}{5}) \div (\frac{2}{3}) = ?$
 a. $\frac{6}{5}$ b. $\frac{6}{5}$ c. $-\frac{6}{5}$ d. $-\frac{5}{6}$
78. Find $a^2b - 2abc$ when $a = -3$, $b = -2$, and $c = 4$
 a. 30 b. -30 c. 66 d. -66
79. Find $2 + 3 \cdot 2^3$
 a. 218 b. 26 c. 40
80. Solve: $X + 4 = -5$
 a. -9 b. -1 c. +1
81. Solve: $-3X = -12$
 a. $X = +4$ c. $X = -4$
82. Solve: $3(X + 4) - 5 = 2X + 10$
 a. $X = -3$ b. $X = 3$ c. $X = 16$
83. Solve: $3(X + 4) = 2X + 6$
 a. $X = -6$ b. $X = 6$ c. $X = 3$

84. Combine like terms: $x + 5y - 8x - 2y$
 a. $-7x - 3y$ b. $-7x + 3y$ c. $7x - 3y$ d. $7x + 3y$
85. Simplify: $3(x - 4) - 4x + 1$
 a. $-x - 11$ b. $-7x - 11$ c. $-x + 4$ d. $-7x + 4$
86. Simplify: $2(a^2 - y) - 3(2a^2 + y)$
 a. $4a^2 - 5y$ b. $-4a^2 - 5y$ c. $-a^2 - y$ d. $-3a^2 - 5y$
87. Solve: $7(x - 2) - 5(x + 3) = -7$
 a. $x=18$ b. $x = -18$ c. $x = -4$ d. $x=11$
88. Solve: $2x + 7 = 7$
 a. $x = -1$ b. $x=1$ c. $x=0$
89. Simplify: $x^6 \cdot x^8 = ?$
 a. x^{48} b. x^2 c. x^{14}
90. Simplify: $(x^6)^2 = ?$
 a. x^{36} b. x^{12} c. x^8
91. Simplify: $7^0 = ?$
 a. 0 b. 1 c. 7
92. Simplify: $(3x^5)(2x^3)$
 a. $5x^5$ b. $5x^8$ c. $6x^8$
93. Simplify: $(-2x^4y^3)^2$
 a. $4x^8y^6$ b. $-4x^8y^6$ c. $4x^6y^5$
94. Simplify: $\frac{x^9}{x^3}$
 a. x^6 b. x^3 c. x^2
95. Simplify: $x^2(x^3 - 3x)$
 a. $-2x^2$ b. $x^6 - 3x^3$ c. $x^5 - 3x^3$

96. Simplify: $\frac{(x^5 y^4)^2}{(x^3 y)^3} =$

- a. xy^3 b. xy^5 c. xy^2

97. Simplify: $(-2x^2)^3$

- a. $-2x^6$ b. $+8x^6$ c. $-2x^6$ d. $-2x^5$

98. Give the value of $7(-2) - (-2)(-1)$

- a. -12 b. -7 c. +7 d. -16

99. Give the value of $3^2 + 6 \div 2$

- a. 12 b. 7.5 c. 6

100. Give the value of $\frac{(-8)(+6)}{(-3)(-4)}$

- a. +4 b. -2 c. -4 d. +2

ANSWERS TO REVIEW

1. d	26. d	51. b	76. b
2. c	27. b	52. d	77. c
3. a	28. c	53. a	78. d
4. b	29. d	54. a	79. b
5. b	30. c	55. b	80. a
6. b	31. a	56. c	81. a
7. e	32. a	57. c	82. b
8. a	33. d	58. c	83. a
9. d	34. b	59. a	84. b
10. c	35. a	60. d	85. a
11. b	36. c	61. a	86. b
12. b	37. d	62. c	87. d
13. b	38. c	63. b	88. c
14. a	39. a	64. a	89. c
15. d	40. c	65. a	90. b
16. a	41. d	66. d	91. b
17. b	42. b	67. c	92. c
18. d	43. c	68. a	93. a
19. b	44. a	69. a	94. a
20. c	45. c	70. b	95. c
21. d	46. c	71. b	96. b
22. c	47. a	72. b	97. a
23. b	48. b	73. a	98. d
24. a	49. d	74. a	99. a
25. a	50. c	75. c	100. c



DEPARTMENT OF THE AIR FORCE

USAF HOSPITAL TYNDALL (TAC)

TYNDALL AIR FORCE BASE FL 32403-6300

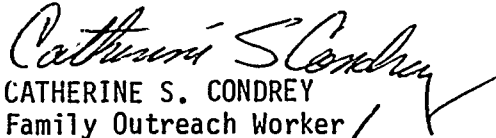
13 May 1987

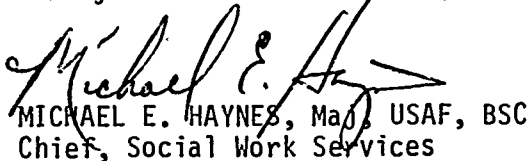
Alice Kingston
Returning Women's Program
Gulf Coast Community College
Panama City, Fl 32401

Dear Ms. Kingston:

Thank you for your participation in Tyndall Air Force Base's Family Fun Day. This day, directed toward educating families with regards to Child Abuse Prevention and Family Life Management Skills in a non-threatening manner, was a success. Your contribution was a significant factor in accomplishing these goals as families became aware of new resources available to them.

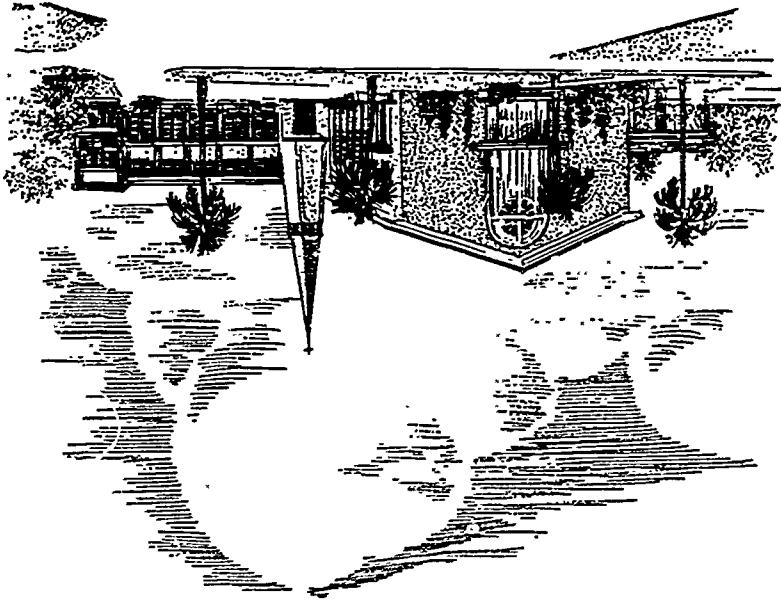
Again, Tyndall Family Advocacy Program wishes to thank you for the time you took to assist us in making Family Fun Day a success.


CATHERINE S. CONDREY
Family Outreach Worker


MICHAEL E. HAYNES, Major, USAF, BSC
Chief, Social Work Services

Panama City, Florida

St. Andrew United Methodist Church



April 30, 1987

Dear Alysce,

Thank you again for your presentation on the "Returning Woman" to our St. Andrew United Methodist Women. Several ladies commented on how interesting your speech was.

You did a wonderful job of representing G.C.C. I appreciate your willingness to take your time to present the program to us.

Sincerely,
Peggy W. Pelt
President
St. Andrew U.M.W. 89



PILOT CLUB OF PANAMA CITY, FLORIDA

3 March 1987

Ms. Alice Kingston
Gulf Coast Community College
Hiway 98
Panama City, Florida

Dear Alice,

Thank you so much for sharing with us your time and expertise. It is always good to hear a speaker who is so thoroughly familiar with her subject and who so obviously enjoys talking about it.

It was a pleasure to have you as our guest.

Sincerely,

Betty Stephens
Betty V. Stephens
President

Spring Planned with YOU in Mind.....

Gulf Coast Community College
Office of Continuing Education
Women's Programs
Non-credit Short Courses

GOALS AND DECISIONS

Designed especially for women who are interested in the dynamics of spouse abuse and how that affects decisions. Co-sponsored by Northwest Florida Mental Health.

Instructor: Rosemary Routa
Date: April 6 - June 22
Time: 6:30 - 8:30 p.m.
Fee: No Charge
Location: Gulf Coast Community College
George G. Tapper Health Sciences, Room 320
Call for registration information

WHEN YOU KEEP WISHING AND HOPING HE'LL CHANGE

The sessions focus on co-dependancy, why women choose the men they do, effects of family of origin and the healing process. This is based on the book "Women Who Love Too Much" by Robin Norwood. Co-sponsored by Northwest Florida Mental Health and St. Andrews Episcopal Church.

Instructor: Cecelia Anderson
Date: April 15 - June 17
Time: 7:00 - 9:00 p.m.
Fee: \$16.00
Location: St. Andrews Episcopal Church
1608 Baker Court, Room 13
Registration deadline: April 13

WHAT WILL I BE WHEN I GROW UP???????

Many women come to a point in life when what always worked doesn't anymore. Maybe a life change or "job burn-out" has prompted a re-assessment of direction. This course will focus on identifying job skills, making a career choice, assessing the need for training or re-training, writing a resume', organizing work and home life and creative job hunting.

Instructor: Cheryl Flax
Date: April 21 - May 26
Time: 6:30 - 8:30 p.m.
Location: Gulf Coast Community College
George G. Tapper Health Sciences, Room 320
Fee: \$16.00

DIVORCE ADJUSTMENT

Gain new insight and support for being on your own, being a single parent and developing new relationships and attitudes.

Instructor: TBA
Date: April 23 - May 28
Time: 6:30 - 8:30 p.m.
Fee: \$16.00
Location: Gulf Coast Community College
George G. Tapper Health Sciences, Room 320

RETURNING WOMEN COURSE

Brush up on basic math and English skills as well as learn time and stress management and career assessment. Be prepared to enroll in credit classes in the fall. Limited Scholarships are available.

Instructor: TBA
Date: 6:30 - 9:30 p.m.
Location: Gulf Coast Community College
George G. Tapper Health Sciences, Room 317
Date: May 5 - July 12
Registration deadline: May 4
Fee: \$45.00

Pre-registration is required. All classes have a 12 student minimum. Classes may be canceled for insufficient enrollment.

Registration may be by mail or in person. Make checks payable to GCCC and mail or report to the Office of Business Affairs, Gulf Coast Community College, 5230 West Highway 98, Panama City, FL 32401.

Refunds granted only if notified before the registration deadline.

For further information call the Office of Continuing Education, 769-1551 Ext 355.

EASTER EGG HUNT

You are invited to bring your children to the Easter Egg Hunt which will be held April 18 at 1:00 P.M. on the Gulf Coast Community College Campus. There will be prizes hidden among the brightly colored Easter eggs for the children. The East Bunny will be there to greet the children so be sure to bring your camera.



Gulf Coast
College

DIVISION OF CONTINUING EDUCATION
GULF COAST COMMUNITY COLLEGE
5230 West Highway 98
Panama City, Florida 32401

An Equal Access/Equal Opportunity Institution

Non-Profit
Organization
U.S. POSTAGE
PAID
Permit No. 101
Panama City, Florida



SINGLE PARENT/DISPLACED HOMEMAKER
SCHOLARSHIP APPLICATION
FOR
VOCATIONAL PROGRAMS

ATTACHMENT X

Date _____

Name _____ Social Security No. _____
Last First MI

Address _____ City State Zip

Telephone Number () Day () Evening

Classification, if currently attending Gulf Coast Community College:
_____ Freshman _____ Sophomore _____ Full-time _____ Part-time

Anticipated GCCC completion date: _____ Cumulative GPA: _____

If not attending GCCC, how long out of school? _____

Previous postsecondary institution(s): (college, university, vocational)

Major/Intended Major at GCCC: _____

Marital Status: _____ Single _____ Married _____ Divorced

If married, is husband disabled? _____ Retired? _____

Number of Children at home: _____ Ages: _____

Annual Family Income: ,(include taxable and nontaxable) _____

Source(s) of Income: _____

List any other scholarships or aid that you have applied of will apply for:

Have you received other financial aid at Gulf Coast? _____ If so, what? _____

Semester applying for: _____

Approximate need: _____ Tuition Assistance _____ Transportation
_____ Child Care _____ Books

I hereby authorize Gulf Coast Community College's Registrar/Financial Aid
Offices to release my academic record/financial status to the Scholarship
Committee and others as appropriate.

_____ date _____ Student's Signature

Race or Ethnic Group (Required by USDOE):		
_____ American Indian/Alaskan	_____ Asian/Pacific Islander	_____ Black
_____ Hispanic	_____ White	
Are you a Florida resident? _____ Yes _____ No		





PARTICIPANT INTAKE PROFILE

GCCC Academic Advisor _____ Semester First Enrolled _____ Program of Study _____	DATE _____
--	------------

PERSONAL DATA

Name _____ Soc. Sec. # _____

Address _____

City _____ State _____ Zip _____

Telephone () _____ () _____
 Day Evening

If no phone, message phone _____

Name Address Telephone

Sex: Male ___ Female ___

Race:

- | | |
|----------------------------------|----------------------------|
| _____ American Indian or Alaskan | _____ Hispanic |
| _____ Asian or Pacific Islander | _____ White (non-hispanic) |
| _____ Black (non-hispanic) | |

Age Group:

- _____ 17 and under
- _____ 18 - 25
- _____ 26 - 34
- _____ 35 - 44
- _____ 45 - 54
- _____ 55 - 64
- _____ 65 and older

Marital Status:

- _____ Single
- _____ Married
- _____ Separated
- _____ Divorced
- _____ Widowed
- _____ Single parent
- _____ married with
retired/disabled spouse
- _____ married/unemployed spouse
- _____ married/spouse absent

Number of Children: _____

Ages of Children: _____

Any disabilities? _____ (if yes, specify) _____

EDUCATION

Education Completed: (circle highest grade completed)

0 1 2 3 4 5 6 7 8 9 10 11 12 GED 13 14 15
 14 or more

EDUCATION (cont'd)

Degrees/Certificates Earned:

- High School Diploma
- Technical Certificate
- A.A. Degree
- A.S. Degree
- Bachelors Degree
- Masters Degree
- OTHER (please specify)
-

Specific Employment Skills:

(i.e. typing, shorthand, etc.)

EMPLOYMENT HISTORY

Are You Employed? ----- if yes, ----- Part-time ----- Full-time ----- Seasonal

Place of Employment: -----

If Unemployed, how long? -----

How many hours do you work weekly?

- 1 - 19 hours
- 20 - 39 hours
- 40 hours
- more than 40 hours

What is your hourly wages?

- less than \$3.00
- \$ 3.00 - \$ 4.99
- \$ 5.00 - \$ 6.99
- \$ 7.00 - \$ 9.99
- \$10.00 or more

FINANCIAL STATUS

Last Year's Annual Household Income From All Sources:

- \$ 0 - \$ 999
- \$1,000 - \$2,999
- \$3,000 - \$4,999
- \$5,000 - \$6,999
- \$7,000 - \$8,999
- \$9,000 and over
- (If over, specify -----)

Source of Income/Assistance:

- Salary
- Alimony
- Child Support
- Regular Insurance Pymts
- Interest/Dividends
- Unemployment Compensation
- AFDC
- General Assistance
- Other (specify) -----
- Rental Income
- Savings
- Social Security
- Subsidized Housing
- Food Stamps
- Training Subsidy
- Pension
- Other Public Assistance

NEEDS ASSESSMENT

Type of Assistance Needed:

- Transportation
- Tuition Assistance
- Child Care
- Books

- Referral to other agency for:
- Legal services
 - Health services
 - Social service agency
 - Child support enforcement
 - Vocational rehabilitation
 - Job Service
 - Mental health agency
 - Domestic violence program
 - Other (specify) _____
 - _____

What type of training or education are you interested in? _____

How did you hear about this program? _____

FOR OFFICE USE ONLY

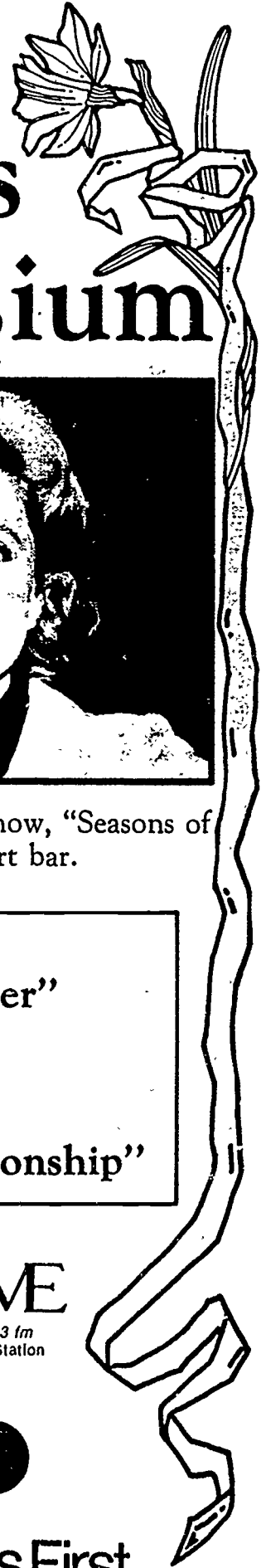
- Single Parent/Homemaker
- Displaced Homemaker
- Single Parent
- Returning Woman

Immediate Needs/Concerns

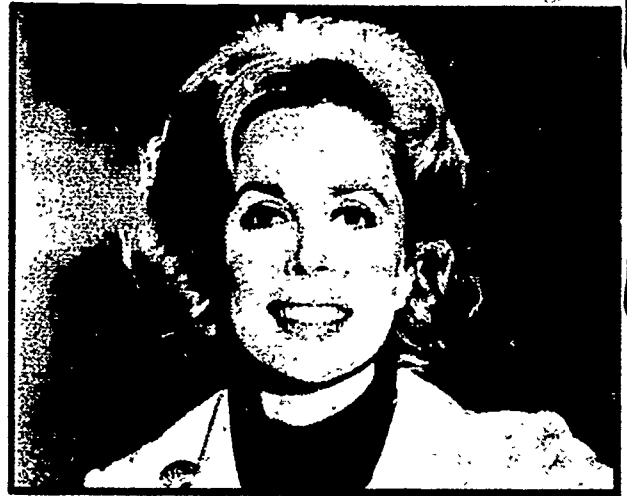
Referrals

Bay Medical Center
presents

The Women's Wellness Symposium



featuring
Dr. Joyce Brothers
speaking on
"Women of the 80's"



Other activities for the day-long symposium include: A special fashion show, "Seasons of Her Life"; a choice of three workshops; a luncheon and a poolside dessert bar.

Workshop Topics:

- "Parent Effectiveness — Birth Through Toddler"
- "Is Wellness Worth the Effort?"
- "Test Your Financial I.Q."
- "Communication and Relationships"
- "Mothers and Daughters — A Complex Relationship"

WHEN: Saturday, July 11th
8:30 to 4:00 p.m.

Soft Sounds
LOVE
WLVV - 106.3 fm
A BayMedia Station

WHERE:  *Marriott's Bay Point Resort*



Peoples First
Financial Savings & Loan

ERIC Contact the Public Relations Department at Bay Medical Center to register, 769-1511, extension 5541100

Women's Wellness Symposium

Women in today's world play many different roles — wife, mother, daughter, professional. The woman of the 80's faces challenges never before faced by women of previous generations.

How can today's woman juggle all of these roles and still keep her sanity?

The Women's Wellness Symposium can help. Bay Medical Center designed the symposium to address some of the complex problems facing women today.

The symposium begins with noted psychologist Dr. Joyce Brothers discussing "Women of the 80's," explaining the "cinderella complex" and the "superwoman syndrome."

In addition to Dr. Brothers' presentation, the symposium will include a luncheon, a poolside dessert bar, a fashion show and a series of three workshops on topics ranging from finance to health to beauty. Women can choose from several workshops including "Test Your Financial I.Q."; "Parent Effectiveness — Birth Through Toddler"; "Is Wellness Worth the Effort?"; "Communication and Relationships"; and "Mothers and Daughters — A Complex Relationship."

Bay Medical Center's Women's Wellness Symposium focuses on the total woman in all her different roles. Because at Bay Medical Center, we know wellness means more than good health. It means feeling good about yourself.



BAY MEDICAL CENTER

Total Commitment, Total Care

ERIC
Full Text Provided by ERIC

Registration Form

Please complete this form and send check or money order for \$20 to:

Bay Medical Center
615 N. Bonita Ave.
Panama City, FL 32401
Attn: Public Relations Dept.

Saturday, July 11
8:30 a.m.-4:00 p.m.

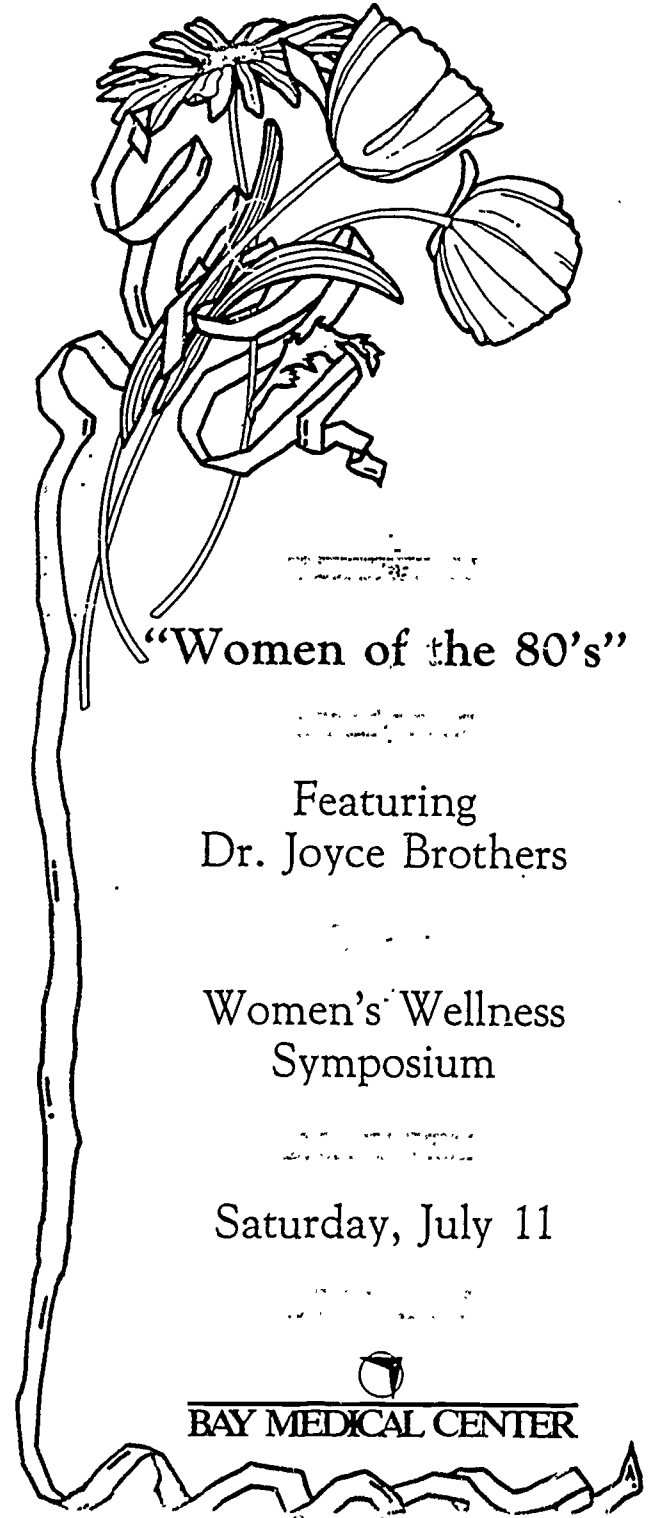


Marriott's Bay Point Resort

NAME _____

ADDRESS _____

PHONE _____



"Women of the 80's"

Featuring
Dr. Joyce Brothers

Women's Wellness
Symposium

Saturday, July 11

BAY MEDICAL CENTER

Name _____

Entry Date _____

How Entry _____

Exit _____

Gulf Coast Community College
 Returning Woman
STUDENT PERSONAL DATA SHEET

GOALS:
RESULTS:

SERVICES RENDERED:

Date	Length of Time Spent with student	Plans and/or Results

103

MAILING LIST

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Emily Sims, Coordinator
School & Community Relations
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Joyce Buttermore
Assistant Professor Speech
Language Arts Division
Florida State University
4917 N. Bay Drive
Panama City, FL 32405 769-8951

Clara Poteat
3127 Lisenby Avenue
Panama City, FL 32405

Dr. Lewis Baber
Gulf Coast Community College
5230 W. Highway 98
Panama City, FL 32401

Carole Mancinelli, Coordinator,
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Panama City, FL 32401 769-1551 ex208

Daniel Smith, Coordinator
Financial Aid
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5230 W. Highway 98
Panama City, FL 32401 769-1551 ex.234

Ginger Worley
Gulf Coast Community College
JTPA
5230 W. Highway 98
Panama City, FL 32401

Betty Wright
WJHG -TV
8195 W. Highway 98
Panama City Beach, FL 32407

Returning Woman Advisory Committee
Minutes
April 23, 1987-6:30-8:15pm

Committee Present: Cheryl Flax-Hyman, Ginger Worley, Clara Poteat, Betty Wright,
Susanne Houff, Alice Kingston

Returning Women: Ilene Ross, Louise and Art Young, Lee and Dick Kochaneck,
Judy Duda, Carole Summey

A delicious dinner was prepared and served by the Hotel and Restaurant students under the direction of Beth Duffey.

Scholarships for tuition and books are available for single parent/displaced homemakers for the summer term in vocational programs. Child care and transportation is also available.

The Career Day for Women and the Entrepreneurial Workshop have been postponed to fall because of other similar workshops being offered by the Small Business Administration.

Alice Kingston will serve as Co-Advisor to F.L.A.G., the student organization that was named outstanding organization on campus. Activities serve many returning students.

Other courses offered this spring through the Women's programs in Continuing Education are "Goals & Decisions," "When You Keep Wishing and Hoping He'll Change," "What will I Be When I Grow Up?," "Divorce Adjustment" and "Returning Woman Course."

- The Returning Women students each made an eloquent, positive and touching statement of their own reasons for being back in college.

Respectfully submitted,



Alice Kingston

MINUTES
RETURNING WOMEN ADVISORY COMMITTEE
MARCH 5, 1987
GRADNER SEMINAR ROOM

PRESENT: Clara Poteat, Betty Wright, Susanne Houff, Carole Mancinelli, Emily Sims, Ginger Worley, Dan Smith, Joyce Buttermore, Lois Oswald, Dr. Lewis Baber, and Alice Kingston

An update on the Returning Woman Program was given by Alice Kingston, Coordinator.

Welfare students concerns were discussed. There seems to be some conflict in receiving AFDC, Food Stamps or housing benefits and receiving a grant for college. Clara Poteat will send us the guidelines for AFDC for consolidating needs. The goal of welfare and college financial aid is to move the student from dependency through education to independence.

Dan Smith is working on a Title III project to help needy students. Also 15 part time scholarships will be available through the Gulf Coast Foundation.

A suggestion was made that a list of resource women be kept so that students could call or talk with a person already in her field. It was also suggested that a support group of returning woman "graduates", and current returning women be formed.

Plans for the Spring were introduced. These include a seminar on "Starting A Business", a special Woman's Day/Career Day on a Friday in May and a dinner for the Advisory Board on April 22.


Alice Kingston
Coordinator, Returning Woman Program