

Review Personal Finance

Name \_\_\_\_\_

MGF 1107 Miami Dade College

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem.

- 1) What number is 32% of 48? 1) \_\_\_\_\_  
 A) 1536 B) 153.6 C) 15.36 D) 1.536
- 2) 21 is 6% of what number? 2) \_\_\_\_\_  
 A) 126 B) 350 C) 35 D) 3500
- 3) 0.22 is 22% of what number? 3) \_\_\_\_\_  
 A) 1 B) 0.1 C) 0.0484 D) 0.01
- 4) Jeans with an original price of \$58 are on sale at 25% off. What is the sale price of the jeans? (Round to the nearest cent, if necessary.) 4) \_\_\_\_\_  
 A) \$56.55 B) \$72.50 C) \$14.50 D) \$43.50
- 5) A dress regularly sells for \$117. The sale price is \$95. Find the percent decrease of the sale price from the regular price. 5) \_\_\_\_\_  
 A) 23.2% B) 18.8% C) 81.2% D) 431.8%

Find the gross income, the adjusted gross income, and the taxable income.

- 6) A taxpayer earned wages of \$65,100, received \$840 in interest from a savings account, and contributed \$2300 to a tax-deferred retirement plan. He was entitled to a personal exemption of \$3500 and had deductions totaling \$5680. 6) \_\_\_\_\_  
 A) \$68,240; \$64,740; \$59,060 B) \$65,940; \$63,640; \$54,460  
 C) \$68,240; \$64,740; \$60,140 D) \$65,940; \$63,640; \$60,140

Use the 2012 FICA tax rates in the table below to solve the problem.

TABLE 8.2 2012 FICA Tax Rates		
Employee's Rates	Matching Rates Paid by the Employer	Self-Employed Rates
<ul style="list-style-type: none"> <li>• 5.65% on first \$110,000 of income</li> <li>• 1.45% of income in excess of \$110,000</li> </ul>	<ul style="list-style-type: none"> <li>• 7.65% on first \$110,000 paid in wages</li> <li>• 1.45% of wages paid in excess of \$110,000</li> </ul>	<ul style="list-style-type: none"> <li>• 13.3% on first \$110,000 of net profits</li> <li>• 2.9% of net profits in excess of \$110,000</li> </ul>

- 7) If you are not self-employed and earn \$128,000, what are your FICA taxes? 7) \_\_\_\_\_  
 A) \$2612 B) \$15,152 C) \$6476 D) \$7232

The principal represents an amount of money deposited in a savings account subject to compound interest at the given rate. Find how much money will be in the account after the given number of years (Assume 360 days in a year.), and how much interest was earned.

$$A = P \left( 1 + \frac{r}{n} \right)^{nt} \quad P = \frac{A}{\left( 1 + \frac{r}{n} \right)^{nt}} \quad A = Pe^{rt} \quad Y = \left( 1 + \frac{r}{n} \right)^n - 1$$

- 8) Principal: \$9000 8) \_\_\_\_\_  
 Rate: 4%  
 Compounded: annually  
 Time: 3 years  
 A) amount in account: \$28,080.00; interest earned: \$19,080.00  
 B) amount in account: \$1,125,000.00; interest earned: \$1,116,000.00  
 C) amount in account: \$10,123.78; interest earned: \$1123.78  
 D) amount in account: \$10,146.78; interest earned: \$1146.78

- 9) Principal: \$8000 9) \_\_\_\_\_  
 Rate: 4%  
 Compounded: semiannually  
 Time: 5 years  
 A) amount in account: \$9751.96; interest earned: \$1751.96  
 B) amount in account: \$8832.65; interest earned: \$832.65  
 C) amount in account: \$9733.22; interest earned: \$1733.22  
 D) amount in account: \$11,841.95; interest earned: \$3841.95

Solve the problem.

- 10) If you placed \$1 into an account that paid interest at a rate of 5% and compounded the interest monthly, how much would that account be worth in 300 years? 10) \_\_\_\_\_  
 A) \$1,584,357.24      B) \$1793.99      C) \$3,168,714.47      D) \$3.48
- 11) A mother invests \$9000 in a bank account at the time of her daughter's birth. The interest is compounded quarterly at a rate of 7%. What will be the value of the daughter's account on her twentieth birthday, assuming no other deposits or withdrawals are made during this period? 11) \_\_\_\_\_  
 A) \$2524.03      B) \$50,400.00      C) \$10,096.10      D) \$36,057.53

Solve the problem.

$$A = P \left( 1 + \frac{r}{n} \right)^{nt} \quad P = \frac{A}{\left( 1 + \frac{r}{n} \right)^{nt}} \quad A = Pe^{rt} \quad Y = \left( 1 + \frac{r}{n} \right)^n - 1$$

- 12) How much money should be deposited today in an account that earns 6% compounded semiannually so that it will accumulate to \$9000 in 2 years? 12) \_\_\_\_\_  
 A) \$7996.38      B) \$10,129.58      C) \$8009.97      D) \$1003.62

Find the value of the annuity and the interest. Round to the nearest dollar.

$$A = \frac{P[(1+r)^t - 1]}{r}$$

$$A = \frac{P \left[ \left( 1 + \frac{r}{n} \right)^{nt} - 1 \right]}{\left( \frac{r}{n} \right)}$$

$$P = \frac{A \left( \frac{r}{n} \right)}{\left[ \left( 1 + \frac{r}{n} \right)^{nt} - 1 \right]}$$

13) Periodic Deposit: \$100 at the end of each year

Rate: 4% compounded annually

Time: 9 years

A) \$921; \$21

B) \$1058; \$158

C) \$3558; \$2658

D) \$342; \$558

13) \_\_\_\_\_

14) Periodic Deposit: \$1000 at the end of each year

Rate: 6.5% compounded annually

Time: 13 years

A) \$19,500; \$6500

B) \$17,371; \$4371

C) \$34,884; \$21,884

D) \$3276; \$9724

14) \_\_\_\_\_

Provide an appropriate response.

15) True or False? Investing in stocks and bonds is risky because it is possible to lose all or part of your principal.

A) True

B) False

15) \_\_\_\_\_

16) True or False? People who buy bonds own a share of a company, same as when they buy stock in the company.

A) True

B) False

16) \_\_\_\_\_

Use  $PMT = \frac{P\left(\frac{r}{n}\right)}{\left[1 - \left(1 + \frac{r}{n}\right)^{-nt}\right]}$  to determine the regular payment amount, rounded to the nearest dollar.

- 17) The price of a home is \$250,000. The bank requires a 15% down payment and two points at the time of closing. The cost of the home is financed with a 20-year fixed-rate mortgage at 6.5%. 17) \_\_\_\_\_
- Find the required down payment.
  - Find the amount of the mortgage.
  - How much must be paid for the two points at closing?
  - Find the total cost of interest over 20 years, to the nearest dollar.
- A) a. down payment: \$37,500  
 b. amount of mortgage: \$212,500  
 c. points paid at closing: \$5000  
 d. total cost of interest over 20 years: \$167,742
- B) a. down payment: \$37,500  
 b. amount of mortgage: \$212,500  
 c. points paid at closing: \$5000  
 d. total cost of interest over 20 years: \$130,242
- C) a. down payment: \$37,500  
 b. amount of mortgage: \$212,500  
 c. points paid at closing: \$4250  
 d. total cost of interest over 20 years: \$380,242
- D) a. down payment: \$37,500  
 b. amount of mortgage: \$212,500  
 c. points paid at closing: \$4250  
 d. total cost of interest over 20 years: \$167,742

- 18) The price of a home is \$330,000. The bank requires a 5% down payment. After the down payment, the balance is financed with a 20-year fixed-rate mortgage at 8%. Determine the monthly mortgage payment (excluding escrowed taxes and insurance) to the nearest dollar. 18) \_\_\_\_\_
- A) \$2637                      B) \$2722                      C) \$2610                      D) \$2622

- 19) In terms of paying less in interest over the full term of the mortgage, which is more economical for a \$200,000 mortgage : 30-year fixed at 7.00% or 20-year fixed at 6.50%? 19) \_\_\_\_\_
- They are the same.
  - The 20-year fixed rate at at 6.50% is more economical.
  - The 30-year fixed rate at at 7.00% is more economical.

Use the following advice from most financial advisors to solve the problem.

- Spend no more than 28% of your gross monthly income for your mortgage payment.
- Spend no more than 36% of your gross monthly income for your total monthly debt.

Round all calculations to the nearest dollar, if necessary.

- 20) Suppose that your gross annual income is \$96,000. 20) \_\_\_\_\_
- What is the maximum amount you should spend each month on a mortgage payment?
  - What is the maximum amount you should spend each month for total credit obligations?
  - If your monthly mortgage payment is 65% of the maximum amount you can afford, what is the maximum amount you should spend each month for all other debt?
- A) (a) \$2240; (b) \$2880; (c) \$368                      B) (a) \$26,880; (b) \$34,560; (c) \$17,088
- C) (a) \$2240; (b) \$2880; (c) \$1424                      D) (a) \$2240; (b) \$2880; (c) \$1456

- 1) C
- 2) B
- 3) A
- 4) D
- 5) B
- 6) B
- 7) C
- 8) C
- 9) A
- 10) C
- 11) D
- 12) A
- 13) B
- 14) A
- 15) A
- 16) B
- 17) D
- 18) D
- 19) B
- 20) C