

Name: _____ Date: _____

- Find the effective rate when the stated rate is 13.5% and the interest is compounded semiannually.
A) 13.21% B) 14.21% C) 13.96% D) 15.01%
- Dr. Sand borrowed some money to buy new furniture for her office. She paid \$245.00 simple interest on a 3.5-year loan at 3.5%. Find the principal.
A) \$2,100 B) \$1,900 C) \$2,150 D) \$2,000
- Express 81.6% as a decimal.
A) 0.816 B) 81.6 C) 8,160 D) 8.16
- Aaron had an unpaid balance of \$1,177.79 on his credit card statement at the beginning of April. He made a payment of \$430.00 during the month, and made purchases of \$366.02. If the interest rate on Aaron's credit card was 4.5% per month on the unpaid balance, find his finance charge and the new balance on May 1.
A) Finance charge = \$52.21; new balance = \$1,166.02
B) Finance charge = \$56.11; new balance = \$1,169.92
C) Finance charge = \$53.00; new balance = \$1,166.81
D) Finance charge = \$55.32; new balance = \$1,169.13
- Find the missing numbers.

Cost	Selling Price	Markup on	Markup Rate	Markup Amount
	\$475.00	selling price	30%	

A) Cost = \$332.50, Markup Amount = \$142.50
B) Cost = \$337.50, Markup Amount = \$137.50
C) Cost = \$337.50, Markup Amount = \$142.50
D) Cost = \$327.50, Markup Amount = \$147.50
- A coat was reduced from \$250 to \$200. Find the percent of the reduction in price.
A) 1.25% B) 0.8% C) 20% D) 25%

7. A coat with an original price of \$300.00 is on sale for \$285.00. Find the percent of the markdown.

A) 10% B) 3% C) 95% D) 5%

8. Find the missing value.

Principal	Rate	Time	Simple Interest
\$1,800	2%		\$270.00

A) 7.5 years B) 8 years C) 8.5 years D) 7 years

9. A \$400 loan is to be paid off in 66 monthly payments of \$11.62. The borrower decides to pay off the loan after 18 payments. Use the rule of 78s to find the amount of interest saved.

A) \$194.13 B) \$200.33 C) \$195.16 D) \$194.62

10. A company borrowed \$3100. It must make monthly payments of \$178.37 for 18 months to pay off the loan. Use the constant ratio formula to find the annual percentage rate.

A) 5.86% B) 4.97% C) 4.51% D) 4.63%

11. Find the compound interest.

Principal	Rate	Compounded	Time
\$700	18.5%	Quarterly	8 years

A) \$2,274.63 B) \$2,264.52 C) \$2,277.77 D) \$2,272.48

12. A tie pin which sells for \$200.00 has a markup rate of 30% on the selling price. Find the amount of the markup and the cost.

A) Markup Amount = \$50.00, Cost = \$150.00
 B) Markup Amount = \$60.00, Cost = \$150.00
 C) Markup Amount = \$60.00, Cost = \$140.00
 D) Markup Amount = \$70.00, Cost = \$130.00

13. Katie had an unpaid balance of \$1,734.50 on her credit card statement at the beginning of January. She made a payment of \$165.00 during the month. If the interest rate on Katie's credit card was 7% per month on the unpaid balance, find the finance charge and the new balance on February 1.
- A) Finance charge = \$119.53; new balance = \$1,689.03
 B) Finance charge = \$121.42; new balance = \$1,690.92
 C) Finance charge = \$125.53; new balance = \$1,695.03
 D) Finance charge = \$131.56; new balance = \$1,701.06
14. A building has a market value of \$229,000.00. If it is assessed at 50% of market value and the tax rate is 40 mills, find the property tax.
- A) \$6,360.00 B) \$2,970.00 C) \$4,580.00 D) \$3,540.00
15. Find the future value of an annuity if you invest \$1,550 annually for 5 years at 11.5% compounded annually.
- A) \$9,800.05 B) \$9,729.30 C) \$9,849.67 D) \$9,749.55
16. Find the simple interest on a loan of \$12,400 for 3.5 years at a rate of 2% per year.
17. Compute an amortization schedule for the first three months for the \$350,000 building purchased with a 30-year mortgage at 6.5% in the previous problem.

<u>Loan</u>	<u>Payment Number</u>	<u>Interest</u>	<u>Payment on Principal</u>	<u>Balance of</u>
	1			
	2			
	3			

18. Find the maturity value.

Principal	Rate	Compounded	Time
\$2,950	6.5%	Quarterly	6 years

19. Roger borrowed \$400.00 for 1 year. His payments are \$34.50 a month. If he decides to pay the loan off after 8 months, find the amount of interest that he will save. (Use the rule of 78s.)

20. A building sells for \$350,000.00. The buyer makes a 20% down payment and obtains a 30-year mortgage at 6.5%.

- (i) Find the down payment.
- (ii) Find the amount of the mortgage.
- (iii) Find the monthly payment.
- (iv) Find the total interest paid.

Monthly Payment per \$1000 of Mortgage (Includes Principal and Interest)		
Rate (%)	Number of years	
	15	30
6.5	\$8.71	\$6.32
7	\$8.99	\$6.65
7.5	\$9.28	\$6.99
8	\$9.56	\$7.34

21. As part of his retirement planning, Mr. Allen purchases an annuity that pays 10% compounded semiannually. If the semiannual payment is \$9,000, how much will Mr. Allen have saved in 5 years?

22. Raoul's credit card statement showed these transactions during May.

May 1	Previous balance	\$304.29
May 6	Payment	\$100.00
May 10	Purchases	\$58.10
May 15	Payment	\$100.00
May 26	Purchases	\$114.73

The interest rate is 18% per month on the average daily balance. Find the average daily balance, the finance charge for the month, and the new balance on June 1. [Hint: Remember that May has 31 days.]

23. Find the effective rate when the stated rate is 1.5% and the interest is compounded semiannually.

24. Janice had an unpaid balance of \$1,233.03 on her credit card statement at the beginning of December. She made a payment of \$25.00 during the month, and made purchases of \$355.69. If the interest rate on Janice's credit card was 8.5% per month on the unpaid balance, find her finance charge and the new balance on January 1.

25. A house sells for \$77,000 and a 40% down payment is made. A 15-year mortgage at 7% was obtained. Find the monthly payment and the total interest paid.

Monthly Payment per \$1000 of Mortgage (Includes Principal and Interest)		
	Number of years	
Rate (%)	15	30
6.5	\$8.71	\$6.32
7	\$8.99	\$6.65
7.5	\$9.28	\$6.99
8	\$9.56	\$7.34

Answer Key

1. C
2. D
3. A
4. C
5. A
6. C
7. D
8. A
9. C
10. C
11. A
12. C
13. B
14. C
15. D
16. \$868.00

17.	<u>Payment Number</u>	<u>Interest</u>	<u>Payment on Principal</u>	<u>Balance of</u>
	<u>Loan</u>			
	1	\$1516.67	\$252.93	\$279,747.07
	2	\$1515.30	\$254.30	\$279,492.77
	3	\$1497.50	\$255.68	\$279,237.09

18. \$4,343.46
19. \$1.79
20.
 - (i) Down payment = \$70,000.00
 - (ii) Amount of mortgage = \$280,000.00
 - (iii) Monthly payment = \$1,769.60
 - (iv) Total interest paid = \$357,056.00
21. \$143,436.82
22. Average daily balance = \$229.02; finance charge = \$41.22; new balance = \$318.34
23. 1.51%
24. Finance charge = \$104.81; new balance = \$1,668.53
25. Monthly payment = \$415.34; total interest paid = \$28,561.20