

MATH REVIEW TEST

- A broker sold a home for \$62,000. The broker charged the seller a 7 percent commission and will pay 25 percent of that amount to the listing salesperson and 30 percent to the selling salesperson. What amount of commission will the listing salesperson receive from the sale of the home?
 - \$1,085
 - \$1,302
 - \$4,340
 - None of the above
- A man signed an agreement to purchase a home. The contract stipulated that the seller replace the damaged bedroom carpet. The carpet the buyer has chosen costs \$14.95 per square yard plus \$3.50 per square yard for installation. If the bedroom dimensions are as illustrated in Figure 12.9, how much will the seller have to pay for the job?
 - \$164.45
 - \$173.62
 - \$222.50
 - \$256.27



Figure 12.9

- Three investors decided to pool their savings and purchase some commercial real estate for \$150,000. If one invested \$40,000 and the second contributed \$20,000, what percentage of ownership was left for the third investor, if ownership interests were allocated on the basis of capital investment?
 - 60 percent
 - 40 percent
 - 26 percent
 - 13 percent
- You own a home valued at \$75,000. Property in your area is assessed at 80 percent of its value and the local tax rate is \$32.50 per \$1,000. What is the amount of your monthly taxes?
 - \$1,950.00
 - \$243.75
 - \$195.00
 - \$162.50
- You are planning to construct a patio in your backyard. An illustration of the surface area to be paved appears in Figure 12.10. If the cement is to be poured as a six-inch slab, how many cubic feet of cement will be poured in your patio?
 - 64 cubic feet
 - 244 cubic feet
 - 384 cubic feet
 - None of the above

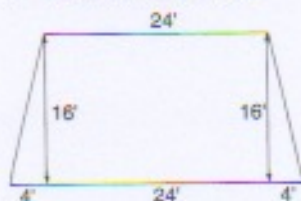


Figure 12.10

8. You receive a monthly salary of \$500 plus 3 percent commission on all of your listings that sell and 2.5 percent on all of your sales. None of the listings you took sold last month, but you received \$7,350 in salary and commission. What was the value of the property you sold?
- \$245,000
 - \$247,000
 - \$274,000
 - \$294,000
9. A residence has proved difficult to sell. The salesperson suggests that it might sell faster if the owners enclosed a portion of the backyard with a privacy fence. If the area to be enclosed is as illustrated in Figure 12.11, how much would the fence cost at \$7.25 per linear foot?
- \$1,051.25
 - \$1,232.50
 - \$1,486.25
 - \$1,667.50



Figure 12.11

10. An owner leases the 24 apartments in his building for a total monthly rental of \$6,000. If this figure represents a 9 percent annual return on the owner's investment, what was the original cost of the property?
- \$800,000
 - \$720,000
 - \$666,667
 - None of the above

For the following questions regarding closing statement proration, base your calculations on a 30-day month. Carry all computations to three decimal places and round off after all computations have been made.

11. A sale is to be closed on April 15. Real estate taxes for the current year are \$1,860 and have not been paid. What amount of the real estate tax proration will be credited to the buyer?
- \$434
 - \$542.51
 - \$1,317.49
 - \$1,860
12. You sell your house to a married couple. They are assuming your 11 percent interest rate loan, which has a \$65,400 mortgage balance. Your house payment is paid in arrears each month and you made your last payment on September 1. You expect to close on September 14. What amount of prorated interest will be debited against you at closing? (Use a 360-day year.)
- \$279.77
 - \$319.74
 - \$419.74
 - \$599.50
13. Your brother sells a home on October 10. At the closing, the buyer assumes a three-year prepaid waste disposal contract, which is due to expire at the end of May of the next year. The original cost of the contract was \$740. What proration amount will be charged to the buyer at closing? (Use a 360-day year.)
- \$144.76
 - \$158.28
 - \$255.49
 - None of the above

14. In a sale of residential property, real estate taxes for the current year amounted to \$1,630 and already have been paid by the seller. The sale is to be closed on November 4. What is the settlement sheet entry for the tax proration?
 1. \$237.19 debit to seller; \$237.19 credit to buyer
 2. \$253.56 credit to seller; \$253.56 debit to buyer
 3. \$1,476.05 debit to seller; \$153.95 credit to buyer
 4. \$253.56 credit to seller only
15. You are buying a house and assuming the seller's mortgage. The unpaid balance after the most recent payment (August 1, the first of the month) was \$64,750. Interest is paid in arrears each month at an annual rate of 12 percent. The sale is to be closed on August 18. What is the amount of the mortgage interest proration to be credited to you at the closing?
 1. \$140.72
 2. \$388.49
 3. \$539.19
 4. None of the above
16. A 200-acre farm is divided into house lots. The streets require one-eighth of the whole farm, and there are 220 lots. How many square feet are there in each lot?
 1. 34,650 square feet
 2. 39,784 square feet
 3. 43,916 square feet
 4. None of the above
17. The taxes of \$2,140 have been paid for the entire calendar year. The seller sells on November 1. What is the amount of the remaining prepaid proration through the day prior to closing?
 1. \$1,961.67
 2. \$1,783.30
 3. \$356.67
 4. \$178.33
18. A broker received a \$28,000 commission check for the sale of a house. The broker's commission was 6 percent of the total sale price. What was the total sale price of the house?
 1. \$560,000
 2. \$466,667
 3. \$297,872
 4. 168,000
19. A seller wants to sell his house and realize \$80,000 from the sale. If his only cost of selling is a 7 percent commission, what is the minimum amount he could sell his house for and realize his desired net?
 1. \$85,600
 2. \$86,022
 3. \$87,400
 4. None of the above
20. You have been making constant payments of \$623 per month on your mortgage. The balance after your last payment was \$59,200. The interest rate on your mortgage is 7 percent. What will be the balance of your mortgage after your next payment?
 1. \$55,056
 2. \$58,577
 3. \$58,922.33
 4. None of the above
21. Using the mortgage factor chart on page 169, what is the monthly payment for a \$150,000 loan at 11.5 percent for 30 years?
 1. \$1,429.50
 2. \$1,486.50
 3. \$1,525.50
 4. \$1,543.50
22. Using the numbers in question 21, what is the total interest paid over the life of the loan?
 1. \$150,000
 2. \$385,140
 3. \$533,653
 4. None of the above

23. A young couple want to purchase a home and feel that they can afford to pay \$990 PI per month on a loan. They have saved enough to make a \$14,000 down payment and pay closing costs. If lenders are offering 30-year loans at 8.25 percent interest, what is the maximum amount this couple can pay for a home using the loan factor of \$7.51 per thousand?
- \$131,800
 - \$141,300
 - \$145,824
 - \$155,400
24. An appraiser has estimated the replacement cost of an office building at \$300,000. The building is 18 years old and has an estimated useful life of 50 years. What is the current total depreciation of the property?
- \$96,000
 - \$102,000
 - \$108,000
 - \$114,000
25. What is the value of an apartment building that is expected to produce a net annual income of \$40,000, if the owner estimates that she should receive a return of 9 percent on her investment?
- \$444,444
 - \$500,000
 - \$571,428
 - \$666,666
26. If the current interest rate of 7% is bought down to 6½%, how much more money can someone who can afford a \$1,500 PI payment borrow? (Use the amortization rate of \$6.65 per thousand for 7% amortized over 30 years, and \$6.32 per thousand for 6½% amortized over 30 years; and then round to the nearest dollar.)
- \$11,778
 - \$225,564
 - \$237,342
 - None of the above
27. How much is the PI payment on a 6%, \$200,000 mortgage, amortized over 30 years using the amortization factor of 6.00?
- \$1,200
 - \$1,800
 - \$3,333
 - None of the above
28. On a 30-year amortized loan of \$200,000, what is the principal portion of the first payment, if the interest rate is 6% and the PI payment is \$1,200?
- \$150
 - \$200
 - \$600
 - \$1,000
29. A homeowner makes a monthly PI payment of \$900. Property taxes, homeowner's insurance, and private mortgage insurance add another \$380 per month. What percentage of the PI payment does it take to cover the additional \$380? (Round to 0.1%.)
- 32.2%
 - 42.2%
 - 52.2%
 - 58.2%
30. A borrower makes \$5,000 a month and has \$750 in monthly recurring debt. If the borrower is allowed to use 36% of the monthly income minus the recurring debt, how much money is available for a house payment?
- \$1,050
 - \$1,500
 - \$1,800
 - \$2,550
31. If a person qualifies to make a PI payment of \$700, how much can he afford to borrow at 7% amortized over 30 years using a per thousand factor of 6.65? (Round to the closest dollar.)
- \$66,500
 - \$70,000
 - \$105,263
 - \$205,263

32. A house payment is referred to as principal, interest, taxes, and
1. recurring debt.
 2. life insurance.
 3. maintenance reserves.
 4. homeowner's insurance.
33. If a person is allowed to use 75% of an \$1,800 PITI payment for PI, how much can be spent on PI?
1. \$1,350
 2. \$1,400
 3. \$1,500
 4. \$1,700
34. How much total interest is paid on a \$100,000 loan amortized over 30 years at 7% interest, using a factor of \$6.65 per thousand?
1. \$66,500
 2. \$100,000
 3. \$139,400
 4. \$239,400
35. How much total interest is paid on a \$100,000 loan amortized over 15 years at 7% interest, using a factor of \$8.98 per thousand?
1. \$61,640
 2. \$89,800
 3. \$161,640
 4. \$171,640
36. A buyer falls in love with a house and needs \$200,000 in order to afford the transaction. If the buyer qualifies for a \$1,300 PI payment and the current interest rate is 7% amortized over 30 years (\$6.65 factor), how much money is the buyer eligible to borrow? (Round to the nearest dollar.)
1. \$66,500
 2. \$133,000
 3. \$195,489
 4. \$200,000
37. A buyer asks a seller to pay some discount points in order to lower the existing 7% interest rate to 6 $\frac{3}{4}$ %. If the buyer can afford a \$1,300 PI payment, using a factor of \$6.49 (6 $\frac{3}{4}$ % amortized over 30 years), how much money is the buyer eligible to borrow? (Round to the nearest dollar.)
1. \$87,750
 2. \$133,000
 3. \$200,308
 4. None of the above
38. A buyer made a 10% down payment of \$15,000. The buyer was then required to purchase private mortgage insurance and pay an annual premium of 0.52% of the loan. What was the buyer's monthly PMI payment?
1. \$58.50
 2. \$150
 3. \$702
 4. \$880
39. If the VA charges a 2% financed funding fee on a \$200,000 VA guaranteed loan, how much is the funding fee?
1. \$200
 2. \$400
 3. \$2,000
 4. \$4,000
40. FHA charges an upfront insurance premium of 1.5%, which is financed into the loan. On a \$135,000 FHA-insured loan, how much is the upfront insurance premium?
1. \$1,500
 2. \$1,350
 3. \$2,030
 4. \$2,025

MATCHING QUIZ

The column on the right contains brief memory links to important terms in Chapter 12. Write the letter of the matching term on the appropriate line.

- | | |
|--|--|
| A. $A = \pi (3.14) \times R^2$ | 1. _____ Circumference of a circle |
| B. $A = L \times W$ | 2. _____ Volume of a cube |
| C. $A = \frac{1}{2}(B \times H)$ | 3. _____ Area of a circle |
| D. $A = \frac{(B1 + B2) \times H}{2}$ | 4. _____ Area of a rectangle |
| E. diameter $\times \pi(3.14)$ | 5. _____ Commission |
| F. $L \times W \times H$ | 6. _____ Area of a triangle |
| G. part divided by total | 7. _____ A word that is equated with tax rate |
| H. part divided by percent | 8. _____ Formula to find monthly PI |
| I. total \times percent | 9. _____ Area of a trapezoid |
| J. Amount charged for real estate services | 10. _____ A fraction |
| K. Millage | 11. _____ Formula to find part |
| L. $\frac{\text{replacement cost}}{\text{years of useful life}}$ | 12. _____ Formula used to arrive at net operating income |
| M. (net) income/rate | 13. _____ Formula used to find total |
| N. (net) income/value | 14. _____ Formula used to find % |
| O. (cap) rate \times value | 15. _____ Straight-line depreciation formula |
| P. loan divided by 1,000 \times amortization factor | 16. _____ Formula used to arrive at value |
| Q. $\frac{\text{numerator}}{\text{denominator}}$ | 17. _____ Formula used to find cap rate |