

CHAPTER TWENTY-FOUR QUIZ

REAL ESTATE MATH

- 1. The value of your house, not including the lot, is \$91,000 today. What was the original cost if it has depreciated 5 percent per year for the past seven years?**
 - a) \$67,407.41
 - b) \$95,789.47
 - c) \$122,850.00
 - d) \$140,000.00

- 2. What was the price per front foot for a 100' x 125' lot that sold for \$125,000?**
 - a) \$1,250
 - b) \$1,000
 - c) \$556
 - d) \$10

- 3. If the savings and loan gives you a 90 percent loan on a house valued at \$88,500, how much additional cash must you produce as a down payment if you have already paid \$4,500 in earnest money?**
 - a) \$3,500
 - b) \$4,000
 - c) \$4,350
 - d) \$8,850

- 4. What did the owners originally pay for their home if they sold it for \$98,672, which gave them a 12 percent profit over their original cost?**
 - a) \$86,830
 - b) \$88,100
 - c) \$89,700
 - d) \$110,510

- 5. What would you pay for a building producing \$11,250 annual net income and showing a minimum rate of return of 9 percent?**
 - a) \$125,000
 - b) \$123,626
 - c) \$101,250
 - d) \$122,625

- 6. The sale of Mrs. Gates's home is to close on September 28. Included in the sale is a garage apartment that is rented to Sandy Dart for \$350 per month. Sandy has paid the September rent. What is the rent proration, using actual days and prorating through the day of closing?**
 - a) \$325.67
 - b) \$23.33
 - c) \$350.00
 - d) \$175.00

7. What is the total cost of a driveway 15' wide, 40' long and 4" thick if the concrete costs \$60.00 per cubic yard and the labor costs \$1.25 per square foot?

- a) \$527.25
- b) \$693.75
- c) \$1,194.00
- d) \$1,581.75

8. An owner agrees to list his property on the condition that he will receive at least \$47,300 after paying a 5 percent broker's commission and paying \$1,150 in closing costs. At what price must it sell?

- a) \$48,450
- b) \$50,815
- c) \$50,875
- d) \$51,000

9. The Loving Gift Shop pays rent of \$600 per month plus 2.5 percent of gross annual sales in excess of \$50,000. What was the average monthly rent last year if gross annual sales were \$75,000?

- a) \$1,125.00
- b) \$756.25
- c) \$600.00
- d) \$652.08

10. If your monthly rent is \$525, what percent would this be of an annual income of \$21,000?

- a) 25%
- b) 30%
- c) 33%
- d) 40%

11. Two brokers split the 6 percent commission on a \$73,000 home. The selling salesperson, Joe, was paid 70 percent of his broker's share. The listing salesperson, Janice, was paid 30 percent of her broker's share. How much did Janice receive?

- a) \$657
- b) \$4,380
- c) \$1,533
- d) \$1,314

12. Find the number of square feet in a lot with a frontage of 75 feet, 6 inches, and a depth of 140 feet, 9 inches.

- a) 10,626.63
- b) 10,652.04
- c) 216.25
- d) 25,510.81

13. You attempt to appraise a 28-unit apartment house, employing the income approach. You discover that each unit rents for \$775 a month, an amount that seems consistent with like rental units in the vicinity. For the past five years the annual expenses of operation have averaged \$82,460. The complex has maintained a consistent vacancy rate of 5%. A potential investor is only interested if the return is 9.5 percent. What value would you arrive at using these variables?

- a) \$2,741,100
- b) \$868,000
- c) \$1,736,000
- d) \$1,873,100

14. How much interest will the seller owe the buyer for a closing date of August 10 if the outstanding loan balance is \$43,580? The interest rate on this assumable loan is 10.5 percent and the last payment was paid on August 1. Prorations are to be done through the day of closing and using a statutory year.

- a) \$127.11
- b) \$254.22
- c) \$125.37
- d) \$381.33

15. The buyer has agreed to pay \$175,000 in sales price, 2.5 loan discount points and a 1 percent origination fee. If the buyer receives a 90 per-cent loan-to-value ratio, how much will the buyer owe at closing for points and the origination fee?

- a) \$1,575.00
- b) \$3,937.50
- c) \$5,512.50
- d) \$6,125.00

16. Calculate eight months' interest on a \$5,000 interest-only loan at 9.5 percent.

- a) \$475.00
- b) \$316.67
- c) \$237.50
- d) \$39.58

17. A 100-acre farm is divided into lots for homes. The streets require $\frac{1}{8}$ of the whole farm, and there are 140 lots. How many square feet are in each lot?

- a) 43,560
- b) 35,004
- c) 31,114
- d) 27,225

18. The 1999 tax bill on the Burnses' home was \$1,282 and was paid in December 2000. The Burnses' have sold their home and will close on April 23, 2001. How much will the tax proration be, using a calendar year and prorating to the day of closing?

- a) \$393.38
- b) \$402.41
- c) \$396.89
- d) \$427.33

19. What is the monthly net income on an investment of \$115,000 if the rate of return is 12.5 percent?

- a) \$1,150.00
- b) \$1,197.92
- c) \$7,666.67
- d) \$14,375.00

20. A salesperson sells a property for \$58,500. The contract he has with his broker is 40 percent of the full commission earned. The commission due the broker is 6 percent. What is the sales-person's share of the commission?

- a) \$2,106
- b) \$1,404
- c) \$3,510
- d) \$2,340

21. Vicki buys 348,480 square feet of land at \$0.75 per square foot. She divides the land into 1/2 acre lots. If she keeps three lots for herself and sells the others for \$24,125 each, what percent of profit does she realize?

- a) 47.4%
- b) 32.2%
- c) 20%
- d) 16.7%

22. \$437 was the insurance premium paid in full in 2001 for a one-year insurance policy that expires June 6, 2002. The house is sold and scheduled to close on February 16, 2002. The buyers are assuming the sellers' insurance policy. What is the amount of the insurance proration if a banker's year is used and all prorations are done through the day of closing?

- a) \$132.31
- b) \$134.74
- c) \$302.26
- d) \$304.69

23. What is the interest rate on a \$10,000 loan with semiannual interest of \$450?

- a) 7%
- b) 9%
- c) 11%
- d) 13.5%

24. A warehouse is 80' wide and 120' long with ceilings 14' high. If 1,200 square feet of floor surface has been partitioned off, floor to ceiling, for an office, how many cubic feet of space will be left in the warehouse?

- a) 151,200
- b) 134,400
- c) 133,200
- d) 117,600

25. An office building produces \$68,580 annual net operating income. What price would you pay for this property to show a minimum return of 12 percent on your investment?

- a) \$489,857
- b) \$571,500
- c) \$685,800
- d) \$768,096

26. A buyer is assuming the balance of a seller's loan. The interest rate is 8 percent and the last monthly payment of \$578.16 was paid on April 1, leaving an outstanding balance of \$18,450. Using a banker's year, compute the interest to be paid by the seller if the sale is to be closed on April 19. Prorate through the day of closing.

- a) \$110.83
- b) \$82.00
- c) \$77.90
- d) \$123.00

27. The lot you purchased five years ago for \$15,000 has appreciated 3.5 percent per year. What is it worth today?

- a) \$12,375
- b) \$15,525
- c) \$17,250
- d) \$17,625

28. A lot has a frontage of 100' and a depth of 150'. If the building line regulations call for a setback of 25' at the front and 6' on the two sides, how many square feet of usable space are left for the building?

- a) 10,350
- b) 11,000
- c) 11,750
- d) 15,000

29. A lease calls for \$1,000 per month minimum plus 2 percent of annual sales in excess of \$100,000. What is the annual rent if the annual sales were \$150,000?

- a) \$12,000
- b) \$13,000
- c) \$14,000
- d) \$15,000

30. In the year 2000, taxes on Don Mark's home were paid in full and amounted to \$1,468. Don sold his home to Chuck Harris and closed the sale on August 29, 2001. What was the prorated tax amount using a calendar year if the proration was calculated to the day of closing?

- a) \$965.26
- b) \$502.74
- c) \$970.51
- d) \$497.49

31. There is a tract of land that is 1.25 acres. The lot is 150 feet deep. How much will the lot sell for at \$65 per front foot?

- a) \$9,750
- b) \$8,125
- c) \$23,595
- d) \$8,125

32. If the broker received a 6.5 percent commission that was \$5,200, what was the sales price of the house?

- a) \$80,400
- b) \$80,000
- c) \$77,200
- d) \$86,600

33. Sue earns \$20,000 per year and can qualify for a monthly PITI payment equal to 25 percent of her monthly salary. If the annual tax and insurance is \$678.24, what is the loan amount she will qualify for if the monthly PI payment factor is \$10.29 per \$1,000 of loan amount?

- a) \$66,000
- b) \$43,000
- c) \$40,500
- d) \$35,000

34. Find the cost of building a house 29' x 34' x 17' with a gable roof 8' high at the highest point. The cost of construction is \$2.25 per cubic foot.

- a) \$55,462.50
- b) \$46,588.50
- c) \$37,714.50
- d) \$27,731.25

35. You invest \$50,000 at a rate of return of 12 per-cent. What is the net operating income?

- a) \$6,000
- b) \$5,600
- c) \$5,000
- d) \$4,167

36. You pay \$65.53 monthly interest on a loan bearing 9.25 percent annual interest. What is the loan amount rounded to the nearest hundred dollars?

- a) \$1,400
- b) \$2,800
- c) \$6,300
- d) \$8,500

37. What percentage of profit would you make if you paid \$10,500 for a lot, built a home on the lot that cost \$93,000, and then sold the lot and house together for \$134,550?

- a) 13%
- b) 23%
- c) 30%
- d) 45%

38. You are purchasing a fourplex and going to close on November 4. Each apartment rents for \$575 per month. On November 1, one apartment is vacant and the others paid the November rent. Compute the rent proration through the day of closing.

- a) \$230.00
- b) \$306.67
- c) \$1,495.00
- d) \$1,993.33

39. An income-producing property has \$62,500 annual gross income and monthly expenses of \$1,530. What is the appraised value if the appraiser uses a 10 percent capitalization rate?

- a) \$441,400
- b) \$625,000
- c) \$183,600
- d) \$609,700

40. A new house and lot cost Mr. Jones \$65,000. Of this total price, it was estimated that the lot was worth \$13,000. Mr. Jones held the property for eight years. Using the straight-line method, assuming an annual depreciation of 1 percent on the house and an annual increase of 8 percent on the lot, what would be the total value of the property at the end of eight years?

- a) \$47,840
- b) \$69,160
- c) \$81,120
- d) \$101,400

41. The seller received a \$121,600 check at closing after paying a 7 percent commission, \$31,000 in other closing costs, and the \$135,700 loan pay-off. What was the total sales price?

- a) \$288,300
- b) \$306,300
- c) \$308,500
- d) \$310,000

42. A fence is being built to enclose a lot 125' by 350'. If there will be one 10' gate, how many running feet of fence will it take?

- a) 465
- b) 600
- c) 940
- d) 960

43. Alfred pays \$2,500 each for four parcels of land. He subdivides them into six parcels and sells each of the six parcels for \$1,950. What was Alfred's percentage of profit?

- a) 14.5%
- b) 17%
- c) 52%
- d) 78%

44. A property sells for \$96,000. If it has appreciated 4 percent per year straight line for the past five years, what did the owner pay for the property five years ago?

- a) \$76,800
- b) \$80,000
- c) \$92,300
- d) \$115,200

45. Bill earns an annual income of \$60,000, and Betty earns \$2,400 per month. How much can Bill and Betty pay monthly for their mortgage payment if the lender uses a 28 percent qualifying ratio?

- a) \$2,072
- b) \$1,400
- c) \$2,352
- d) \$672

46. If Don borrows \$4,400, agreeing to pay back principal and interest in 18 months, what annual interest rate is Don paying if the total pay-back is \$5,588?

- a) 15%
- b) 18%
- c) 21.3%
- d) 27%

47. If you purchase a lot that is 125' x150' for \$6,468.75, what price did you pay per front foot?

- a) \$23.52
- b) \$43.13
- c) \$51.75
- d) \$64.69

48. Kelli has been granted a 90 percent loan for \$340,500. How much will Kelli's monthly principal and interest payment be, using a loan payment factor of \$7.16 per \$1,000 of loan?

- a) \$2,194.18
- b) \$4,755.59
- c) \$2,437.98
- d) \$3,064.50

49. Calculate the amount of commission earned by a broker on a property selling for \$61,000 if 6 percent is paid on the first \$50,000 and 3 per-cent on the remaining balance.

- a) \$3,330
- b) \$3,830
- c) \$3,600
- d) \$3,930

50. A 50' x 100' lot has a 2,400-square-foot house on it that contains four bedrooms and three bathrooms. What percent of the lot is not taken up by the house?

- a) 21%
- b) 48%
- c) 50%
- d) 52%

The Career Institute

PSI REAL ESTATE STATE EXAM PREP FOR TENNESSEE

INSTRUCTIONS: Print an answer sheet and take the practice exam. Using the answer key, grade your work by dividing the number of correct answers by the total number of questions.

Example: 80 correct divided by 100 questions = .80 or 80% correct.

The PSI exam will require 70% for the affiliate exam and 75% for the broker exam to pass.

>>>>> Please note that the answer slot for TRUE and FALSE are the same as "a.[]" and "b.[]"

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| 1. a.[] b.[] c.[] d.[] | 34. a.[] b.[] c.[] d.[] | 67. a.[] b.[] c.[] d.[] | 100. a.[] b.[] c.[] d.[] |
| 2. a.[] b.[] c.[] d.[] | 35. a.[] b.[] c.[] d.[] | 68. a.[] b.[] c.[] d.[] | 101. a.[] b.[] c.[] d.[] |
| 3. a.[] b.[] c.[] d.[] | 36. a.[] b.[] c.[] d.[] | 69. a.[] b.[] c.[] d.[] | 102. a.[] b.[] c.[] d.[] |
| 4. a.[] b.[] c.[] d.[] | 37. a.[] b.[] c.[] d.[] | 70. a.[] b.[] c.[] d.[] | 103. a.[] b.[] c.[] d.[] |
| 5. a.[] b.[] c.[] d.[] | 38. a.[] b.[] c.[] d.[] | 71. a.[] b.[] c.[] d.[] | 104. a.[] b.[] c.[] d.[] |
| 6. a.[] b.[] c.[] d.[] | 39. a.[] b.[] c.[] d.[] | 72. a.[] b.[] c.[] d.[] | 105. a.[] b.[] c.[] d.[] |
| 7. a.[] b.[] c.[] d.[] | 40. a.[] b.[] c.[] d.[] | 73. a.[] b.[] c.[] d.[] | 106. a.[] b.[] c.[] d.[] |
| 8. a.[] b.[] c.[] d.[] | 41. a.[] b.[] c.[] d.[] | 74. a.[] b.[] c.[] d.[] | 107. a.[] b.[] c.[] d.[] |
| 9. a.[] b.[] c.[] d.[] | 42. a.[] b.[] c.[] d.[] | 75. a.[] b.[] c.[] d.[] | 108. a.[] b.[] c.[] d.[] |
| 10. a.[] b.[] c.[] d.[] | 43. a.[] b.[] c.[] d.[] | 76. a.[] b.[] c.[] d.[] | 109. a.[] b.[] c.[] d.[] |
| 11. a.[] b.[] c.[] d.[] | 44. a.[] b.[] c.[] d.[] | 77. a.[] b.[] c.[] d.[] | 110. a.[] b.[] c.[] d.[] |
| 12. a.[] b.[] c.[] d.[] | 45. a.[] b.[] c.[] d.[] | 78. a.[] b.[] c.[] d.[] | 111. a.[] b.[] c.[] d.[] |
| 13. a.[] b.[] c.[] d.[] | 46. a.[] b.[] c.[] d.[] | 79. a.[] b.[] c.[] d.[] | 112. a.[] b.[] c.[] d.[] |
| 14. a.[] b.[] c.[] d.[] | 47. a.[] b.[] c.[] d.[] | 80. a.[] b.[] c.[] d.[] | 113. a.[] b.[] c.[] d.[] |
| 15. a.[] b.[] c.[] d.[] | 48. a.[] b.[] c.[] d.[] | 81. a.[] b.[] c.[] d.[] | 114. a.[] b.[] c.[] d.[] |
| 16. a.[] b.[] c.[] d.[] | 49. a.[] b.[] c.[] d.[] | 82. a.[] b.[] c.[] d.[] | 115. a.[] b.[] c.[] d.[] |
| 17. a.[] b.[] c.[] d.[] | 50. a.[] b.[] c.[] d.[] | 83. a.[] b.[] c.[] d.[] | 116. a.[] b.[] c.[] d.[] |
| 18. a.[] b.[] c.[] d.[] | 51. a.[] b.[] c.[] d.[] | 84. a.[] b.[] c.[] d.[] | 117. a.[] b.[] c.[] d.[] |
| 19. a.[] b.[] c.[] d.[] | 52. a.[] b.[] c.[] d.[] | 85. a.[] b.[] c.[] d.[] | 118. a.[] b.[] c.[] d.[] |
| 20. a.[] b.[] c.[] d.[] | 53. a.[] b.[] c.[] d.[] | 86. a.[] b.[] c.[] d.[] | 119. a.[] b.[] c.[] d.[] |
| 21. a.[] b.[] c.[] d.[] | 54. a.[] b.[] c.[] d.[] | 87. a.[] b.[] c.[] d.[] | 120. a.[] b.[] c.[] d.[] |
| 22. a.[] b.[] c.[] d.[] | 55. a.[] b.[] c.[] d.[] | 88. a.[] b.[] c.[] d.[] | 121. a.[] b.[] c.[] d.[] |
| 23. a.[] b.[] c.[] d.[] | 56. a.[] b.[] c.[] d.[] | 89. a.[] b.[] c.[] d.[] | 122. a.[] b.[] c.[] d.[] |
| 24. a.[] b.[] c.[] d.[] | 57. a.[] b.[] c.[] d.[] | 90. a.[] b.[] c.[] d.[] | 123. a.[] b.[] c.[] d.[] |
| 25. a.[] b.[] c.[] d.[] | 58. a.[] b.[] c.[] d.[] | 91. a.[] b.[] c.[] d.[] | 124. a.[] b.[] c.[] d.[] |
| 26. a.[] b.[] c.[] d.[] | 59. a.[] b.[] c.[] d.[] | 92. a.[] b.[] c.[] d.[] | 125. a.[] b.[] c.[] d.[] |
| 27. a.[] b.[] c.[] d.[] | 60. a.[] b.[] c.[] d.[] | 93. a.[] b.[] c.[] d.[] | 126. a.[] b.[] c.[] d.[] |
| 28. a.[] b.[] c.[] d.[] | 61. a.[] b.[] c.[] d.[] | 94. a.[] b.[] c.[] d.[] | 127. a.[] b.[] c.[] d.[] |
| 29. a.[] b.[] c.[] d.[] | 62. a.[] b.[] c.[] d.[] | 95. a.[] b.[] c.[] d.[] | 128. a.[] b.[] c.[] d.[] |
| 30. a.[] b.[] c.[] d.[] | 63. a.[] b.[] c.[] d.[] | 96. a.[] b.[] c.[] d.[] | 129. a.[] b.[] c.[] d.[] |
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| 32. a.[] b.[] c.[] d.[] | 65. a.[] b.[] c.[] d.[] | 98. a.[] b.[] c.[] d.[] | 131. a.[] b.[] c.[] d.[] |
| 33. a.[] b.[] c.[] d.[] | 66. a.[] b.[] c.[] d.[] | 99. a.[] b.[] c.[] d.[] | 132. a.[] b.[] c.[] d.[] |

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