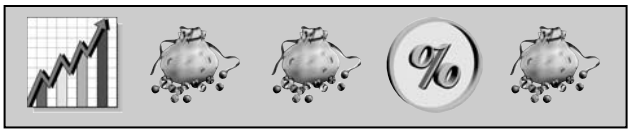
SECTION QUIZ 3-3

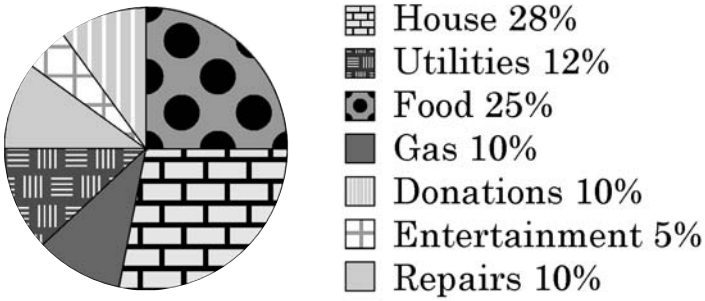


Remember:
Score an 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 3.3 points.

Refer to the pie graph below to answer questions 1-2.

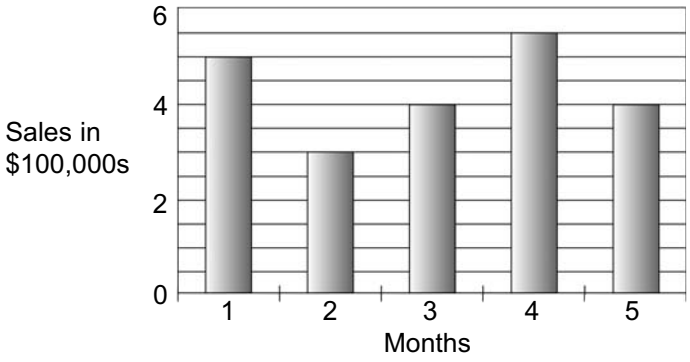


1. Which category is approximately three times the size of three other categories?

_____

2. If the family's income for a week is $800.00, how much would they spend on food?
$_____
(a) $400.00 (b) $200.00 (c) $300.00 (d) $500.00

Refer to the graph below to answer questions 3-4.

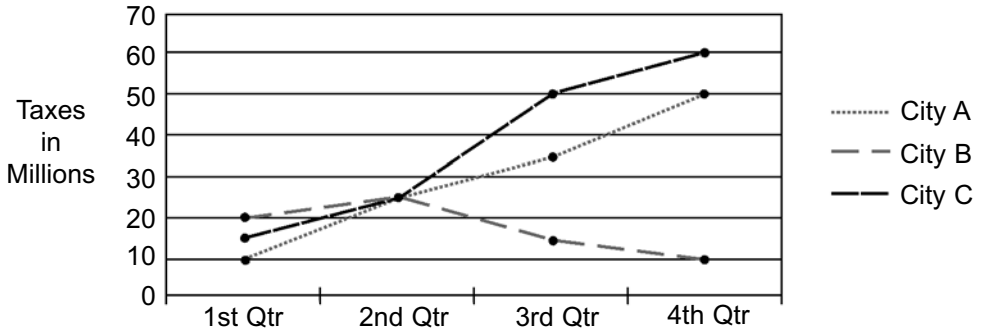


3. The graph above is a graph of sales of math books by a publisher for each of the first five months of last year. The y-axis represents the dollar sales of the math books in $100,000's. The x-axis is the number of each month. The most money was taken in by the publisher during the _____ month.

4. The graph shows that the least dollar amount of books was taken in during the _____ month.

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Refer to the graph below to answer questions 5-6.



5. Three cities' sales tax revenues are plotted on the graph above. If city C's tax revenues continued into the first quarter of the next year at the same rate, estimate the amount of tax revenue city C would have at the beginning of the first quarter of the next year.

_____

6. Which city's revenues appear the most stable (level) for the most of the year?

_____.

7. The formula for _____ is:

$$\frac{\text{the number of elements in the set containing favorable outcomes}}{\text{the number of elements in the sample set}}.$$

Calculate the probabilities.

8. Calculate the probability of drawing the number *5* from a group of numbers in a box containing numbers one through thirteen. _____

9. Calculate the probability of drawing an even number from the box in problem #8.

_____

10. A number cube has six sides labeled 1, 2, 3, 4, 5, and 6. Calculate the probability of rolling a 2. _____

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11. The number cube in question #10 is rolled three times. Calculate P(1, 2, 1).

_____

An ice chest contained 3 bottles of orange juice, 4 bottles of grape juice and 3 bottles of apple juice (12-13).

12. Calculate the probability that the first bottle of juice pulled out randomly would be orange juice. _____

13. Calculate the probability that the second bottle of juice pulled from the ice chest was the bottle of apple juice. (The first bottle was not returned to the ice chest.)

_____

Work the following problems.

14. The value of $\sqrt{21}$ would be between the numbers 4 and _____ on a number line.

15. A school board meeting was held to consider purchasing new computers for all the school offices. The computers were $1,875.00 each and the school board needed to purchase 19 computers. The school board asked Professor K, who was present at the meeting, to estimate the total cost of the computers. Which of the following is the answer Professor K determined to be the answer after rounding? _____

(a) $4,400.00 (b) $40,000.00 (c) $44,000.00 (d) none of these

16. Estimate the product of 395 and 22. _____

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17. A company borrowed $185,000.00 at an interest rate of 8%. Which of the following is the best estimate for the amount of interest the company will owe at the end of one year?

_____

(a) $20,000.00 (b) $10,000.00 (c) $16,000.00 (d) not here

18. Estimate the amount of interest that Professor K would pay the first year on a car loan of $28,000.00 at 9% interest. _____

19. A company borrowed $300,000 at 10% interest for a term of 5 years. Calculate the simple interest the company would owe on the loan at the end of the term.

_____

20. The amount of a school bond loan to build a new gymnasium was $100,000.00 and the interest rate was 5%. The term of the loan was 10 years. Calculate the simple interest on the loan at the end of the term._____

21. An $18,000.00 loan at a bank is paid off in 6 months. The simple interest rate is 5%. Calculate the interest owed at the end of six months._____

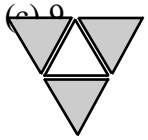
22. Calculate the simple interest on a $20,000.00 loan at 4% for 9 months._____

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Solve the problems.

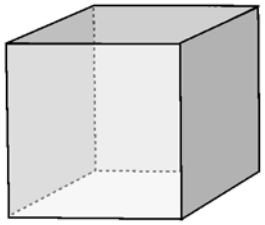
23. Determine how many congruent triangles the same size as the initial triangle will be in the third layer. You must cover all exposed sides with each layer. The first layer has 3 triangles as shown. _____

(a) 6 (b) 12 (c) 9 (d) 15



24. Determine how many cubes would be in the second layer of a cube suspended in space.

_____



25. Determine the formula for the *n*th term of this sequence of numbers: 0, 3, 8, 15, 24, ….

Match the following Life Principles.

26. _____ *"The probability of success*

27. _____ *"Take note of the things that interest you,*

28. _____ *"Draw a line between good and bad*

29. _____ *"Pattern your actions*

30. _____ *"Estimate*

(a) *is determined by your attitude."*

(b) *the cost of your actions."*

(c) *after that which is good."*

(d) *for they will affect the balance of your life."*

(e) *and do not cross it."*

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