Chapter 1 Test Study Guide

Read each question. Then fill in the correct answer on the answer sheet provided by your teacher or on a sheet of paper.

- 1. The ratio of cats to dogs seen by a veterinarian in one day is 2 to 5. If a vet saw 40 dogs in one day, how many cats did he see?
- **2.** At a sports camp, there is one counselor for every 12 campers. If there are 156 campers attending the camp, how many counselors will there be for 156 campers?

| Campers | Counselors |
|---------|------------|
| 12 | 1 |
| 24 | 2 |
| 156 | |

- **3.** A car jack requires a force of 110 pounds to lift a 2,500-pound car. In simplest form, what is the ratio of the car's weight to the force required to lift the car?
- **4.** John Baker is making a cake for the school dance. The recipe calls for 2 cups of sugar for every 3 cups of flour. How many cups of flour are needed, if she is using 18 cups of sugar?

5. Which rate gives the best price for scrapbook paper?

6. Which of the following ratios is equivalent to $\frac{5}{7}$?

A.
$$\frac{10}{12}$$

$$C.\frac{15}{17}$$

B.
$$\frac{3}{5}$$

D.
$$\frac{10}{14}$$

7. The table shows the cups of whole wheat flour required to make dog biscuits.

| Number of Dog Biscuits | 10 | 35 |
|------------------------------|----|----|
| Cups of Whole Wheat Flour | 2 | • |

How many cups of whole wheat flour are required to make 35 biscuits?

8. Find the GCF of 30 and 48

9. There are 12 boys and 15 girls in your class. Four new students, 3 boys and 1 girl, join your class. Will the ratio of boys to girls after the students are added be equivalent to the original group? Why or why not?

10. The table shows the cost of different kinds of fruit.

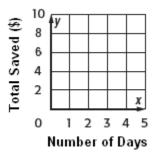
| Fruit | banana | apple | orange | grapes |
|---------------------|--------|-------|--------|--------|
| Cost per pound (\$) | 0.60 | 1.89 | 0.99 | 1.00 |

To the nearest cent, what is the cost of 5 pounds of grapes?

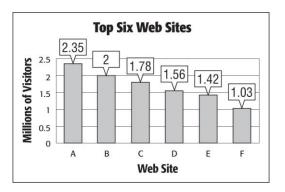
11. Mr. Reinard bought 5 pounds of feed for his chickens for \$10. How much did the feed cost per pound in dollars?

12. Tanya is saving \$2 each day to buy a new sweater. The table shows the amount that Tanya saves each day to buy a new sweater. Graph each ordered pair (days, total saved) and explain the meaning of the pattern on the graph.

| Tanya's Savings | | | | |
|-------------------|------------------------|---------------------|--|--|
| Number of Days, x | Total Saved (\$), y | Ordered Pair (x, y) | | |
| 0 | 0 | | | |
| 1 | 2 | | | |
| 2 | 4 | | | |
| 3 | 6 | | | |
| 4 | 8 | | | |



13. The bar graph below shows the average number of visitors to different Web sites during one month.



How many visitors can Web site B expect to have in one year?

14. Find the LCM of 9 and 18.