## Ratios and Proportions Study Guide

1. What is the ratio of the number of black dots to the number of white dots?

2. If the two ratios are proportional, what is the value of $m$ ?

$$
\frac{6}{m}=\frac{24}{32}
$$

5. Rectangle $A$ is similar to rectangle $B$. What is the length of the missing side $G$ ?

6. If the two ratios are proportional, what is the value of $x$ ?

$$
\frac{5}{7}=\frac{60}{x}
$$

6. The ratio of boys to girls in Mr. Fitzpatrick's class is 5 to 7. How many boys are in his class if there are 21 girls?
7. Esmeralda uses 5 eggs to make 8 pounds of potato salad. If she makes 48 pounds of potato salad for the school barbecue, how many eggs will she need?
8. Jazmyn is the manager of a car tire company. Her company has kept track of how many tires they sell every hour. How many tires would she sell after 12 hours?

| Hours | 2 | 4 | 6 | 8 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Tires | 20 | 40 | 60 |  |  |  |

8. Mr. Tell was driving his car from Houston to San Antonio, TX. The distance between the two cities is 320 miles. If it took Mr. Tell 8 hours to drive to San Antonio, what was his average speed in miles per hour?

Vocabulary: Write what each word means!

## Ratio

Proportion

A $\$ 15$ for 5 cans of Sprite
B $\quad \$ 28$ for 4 cans of Coke
C $\$ 100$ for 50 cans of Pepsi
D $\quad \$ 36$ for 3 cans of Mountain Dew

## Scale Factor

Similar Figures

## Congruent Figures

Answers:

1) 3 to 2
2) 7 to 10
3) $x=84$
4) $m=8$
5) $g=10$
6) 15 boys
7) 30 eggs
8) 40 miles per hour
9) $C$
10) 120 tires
