

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## RATIO &amp; PROPORTION: Worksheet 3

There are 3 red marbles, 4 blue marbles, 2 black marbles, and 6 yellow marbles in a bag.  
Write the ratios of the following comparisons as fractions in simplest form.

- 1) black to yellow
- 2) yellow to the total number of marbles

Solve the following proportions for the given variable.

3)  $\frac{x}{7} = \frac{30}{42}$

4)  $\frac{6}{y} = \frac{20}{50}$

5)  $\frac{3}{11} = \frac{12}{w}$

6)  $\frac{4.5}{3} = \frac{t}{12}$

7)  $\frac{8}{5.4} = \frac{30}{x}$

8)  $\frac{720}{300} = \frac{r}{55}$

9) A map key shows 1.25 inches = 150 miles. How many miles would 4.5 inches equal?

10) Bill scored 75% on a test. He answered 90 questions correctly. How many questions were on the test?

## KEY

### RATIO & PROPORTION: Worksheet 3

There are 3 red marbles, 4 blue marbles, 2 black marbles, and 6 yellow marbles in a bag. Write the ratios of the following comparisons as fractions in simplest form.

- 1) black to yellow  $\frac{2}{6} = \frac{1}{3}$
- 2) yellow to the total number of marbles  $\frac{6}{15} = \frac{2}{5}$

Solve the following proportions for the given variable.

3)  $\frac{x}{7} = \frac{30}{42}$        $7 \cdot 30 \div 42 = 5$

4)  $\frac{6}{y} = \frac{20}{50}$        $6 \cdot 50 \div 20 = 15$

5)  $\frac{3}{11} = \frac{12}{w}$        $11 \cdot 12 \div 3 = 44$

6)  $\frac{4.5}{3} = \frac{t}{12}$        $4.5 \cdot 12 \div 3 = 18$

7)  $\frac{8}{5.4} = \frac{30}{x}$        $5.4 \cdot 30 \div 8 = 20.25$

8)  $\frac{720}{300} = \frac{r}{55}$        $720 \cdot 55 \div 300 = 132$

- 9) A map key shows 1.25 inches = 150 miles. How many miles would 4.5 inches equal?

$$\frac{1.25}{150} = \frac{4.5}{x} \quad 150 \cdot 4.5 \div 1.25 = 540$$

- 10) Bill scored 75% on a test. He answered 90 questions correctly. How many questions were on the test?

$$\frac{75}{100} = \frac{90}{x} \quad 100 \cdot 90 \div 75 = 120$$