Worksheet 1-6 - Math 7

Solve Proportional Relationships

Solve each proportion.

1.
$$\frac{b}{5} = \frac{8}{16}$$

$$2.\frac{18}{x} = \frac{6}{10}$$

$$3.\frac{t}{6} = \frac{30}{36}$$

$$4.\,\frac{11}{10}=\frac{n}{14}$$

5.
$$\frac{2.5}{35} = \frac{2}{d}$$

6.
$$\frac{3.5}{18} = \frac{z}{36}$$

7.
$$\frac{0.45}{4.2} = \frac{p}{14}$$

8.
$$\frac{2.4}{6} = \frac{2.8}{5}$$

9.
$$\frac{3.6}{k} = \frac{0.2}{0.5}$$

For Exercises 10 –12, assume all situations are proportional.

- **10. CLASSES** For every girl taking classes at the martial arts school, there are 3 boys who are taking classes at the school. If there are 236 students taking classes, write and solve a proportion to predict the number of boys taking classes at the school.
- **11. BICYCLES** An assembly line worker at Rob's Bicycle factory adds a seat to a bicycle at a rate of 2 seats in 11 minutes. Write a proportion relating the number of seats *s* to the number of minutes *m*. At this rate, how long will it take to add 16 seats? 19 seats?
- **12. PAINTING** Lisa is painting a fence that is 26 feet long and 7 feet tall. A gallon of paint will cover 350 square feet. Write and solve a proportion to determine how many gallons of paint Lisa will need.