

Name \_\_\_\_\_

Date \_\_\_\_\_

### Proportional Relationships Word Problems - Independent Practice Worksheet

Complete all the problems.

1) Andrea rents a bike for a day. The rental charges can be determined by the equation:  $R = \$0.5d$ , where  $R$  is rental charges and  $d$  is number of days she rents the bike. Calculate the unit rate.

2) In a laboratory, scientists are performing chemical reactions. The amount of product formed by a reaction can be determined by the equation  $P = .25r$ , where  $P$  is the product and  $r$  is the amount of reactants used. Find out the constant of proportionality.



3) There is a wood shop that makes boats. The number of boats constructed can be determined by the equation  $B = .04w$ , where  $B$  is number of boats and  $w$  is number of wooden logs used. Identify the constant of proportionality

4) Greg has to find the area of a rectangle. The area can be determined by the equation  $A = 5l$ , where  $A$  is area and  $l$  is the length of rectangle. What is the constant of proportionality?

5) There is a chair factory. The number of chairs completed can be determined by the equation  $C = 4l$ , where  $C$  is the number of chairs and  $l$  is the number of workers that are making chairs. Identify the unit rate.



Name \_\_\_\_\_

Date \_\_\_\_\_

6) At a party, the number of cold drink bottles consumed can be determined by equation  $B = 3G$ , where  $B$  is the number of bottles and  $G$  is the number of guests at the party. Calculate the constant of proportionality.

7) Harry is an artist. He paints portraits. The number of paintings he makes can be determined by the equation  $p = .3b$  where  $p$  is the number of painting and  $b$  is the number of paint bottles used. Identify the constant of proportionality.

8) Fred has a garden. The number of flowers in the garden can be determined by the equation:  $F = 2b$ , where  $F$  is the number of flowers and  $b$  is the number of bulbs Fred has planted. Find the constant of proportionality.

9) Daisy made bread. The equation  $B = 4f$  shows the number of loaves of bread baked based on the amount of flour used, where  $B$  is the number of loaves of bread made and  $d$  is the amount of flour used. Find out the constant of proportionality.

10) The number of milk bottles sold can be determined by the equation:

$P = 0.35n$ , where  $P$  is the number of bottles of milk and  $n$  is the number of boxes opened. What is the constant of proportionality (unit rate)?

