



NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

**Unit 2, Lesson 5****Practice Problems**

1. The table represents the relationship between a length measured in meters and the same length measured in kilometers.

a. Complete the table.

b. Write an equation for converting the number of meters to kilometers. Use  $x$  for number of meters and  $y$  for number of kilometers.

<b>meters</b>	<b>kilometers</b>
1,000	1
3,500	
500	
75	
1	
$x$	

2. Concrete building blocks weigh 28 pounds each. Using  $b$  for the number of concrete blocks and  $w$  for the weight, write two equations that relate the two variables. One equation should begin with  $w =$  and the other should begin with  $b =$ .

3. A store sells rope by the meter. The equation  $p = 0.8L$  represents the price  $p$  (in dollars) of a piece of nylon rope that is  $L$  meters long.

- a. How much does the nylon rope cost per meter?  
b. How long is a piece of nylon rope that costs \$1.00?

4. The table represents a proportional relationship. Find the constant of proportionality and write an equation to represent the relationship.



NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

$a$	$y$
2	$\frac{2}{3}$
3	1
10	$\frac{10}{3}$
12	4

Constant of proportionality: \_\_\_\_\_

Equation:  $y =$  \_\_\_\_\_

5. On a map of Chicago, 1 cm represents 100 m. Select **all** statements that express the same scale.
- A. 5 cm on the map represents 50 m in Chicago.
  - B. 1 mm on the map represents 10 m in Chicago.
  - C. 1 km in Chicago is represented by 10 cm the map.
  - D. 100 cm in Chicago is represented by 1 m on the map.