

Lesson 2 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.

meters	kilometers
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.

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

Constant of proportionality:

Equation: y =

(From Unit 5, Lesson 1.)

5. Jada walks at a speed of 3 miles per hour. Elena walks at a speed of 2.8 miles per hour. If they both begin walking along a walking trail at the same time, how much farther will Jada walk after 3 hours? Explain your reasoning.

(From Unit 2, Lesson 18.)