### Lesson 5 Practice Problems

1. The table represents the relationship between a length measured in meters and the same length measured in kilometers.
   1. Complete the table.
   2. Write an equation for converting the number of meters to kilometers. Use for number of meters and for number of kilometers.

| * meters | * kilometers |
| --- | --- |
| * 1,000 | * 1 |
| * 3,500 |  |
| * 500 |  |
| * 75 |  |
| * 1 |  |
|  |  |

1. Concrete building blocks weigh 28 pounds each. Using for the number of concrete blocks and for the weight, write two equations that relate the two variables. One equation should begin with and the other should begin with .
2. A store sells rope by the meter. The equation represents the price (in dollars) of a piece of nylon rope that is meters long.
   1. How much does the nylon rope cost per meter?
   2. How long is a piece of nylon rope that costs $1.00?
3. The table represents a proportional relationship. Find the constant of proportionality and write an equation to represent the relationship.

|  |  |
| --- | --- |
| * 2 |  |
| * 3 | * 1 |
| * 10 |  |
| * 12 | * 4 |

* Constant of proportionality: \_\_\_\_\_\_\_\_\_\_
* Equation:
* (From Unit 2, Lesson 4.)

1. On a map of Chicago, 1 cm represents 100 m. Select **all** statements that express the same scale.
   1. 5 cm on the map represents 50 m in Chicago.
   2. 1 mm on the map represents 10 m in Chicago.
   3. 1 km in Chicago is represented by 10 cm the map.
   4. 100 cm in Chicago is represented by 1 m on the map.

* (From Unit 1, Lesson 8.)



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