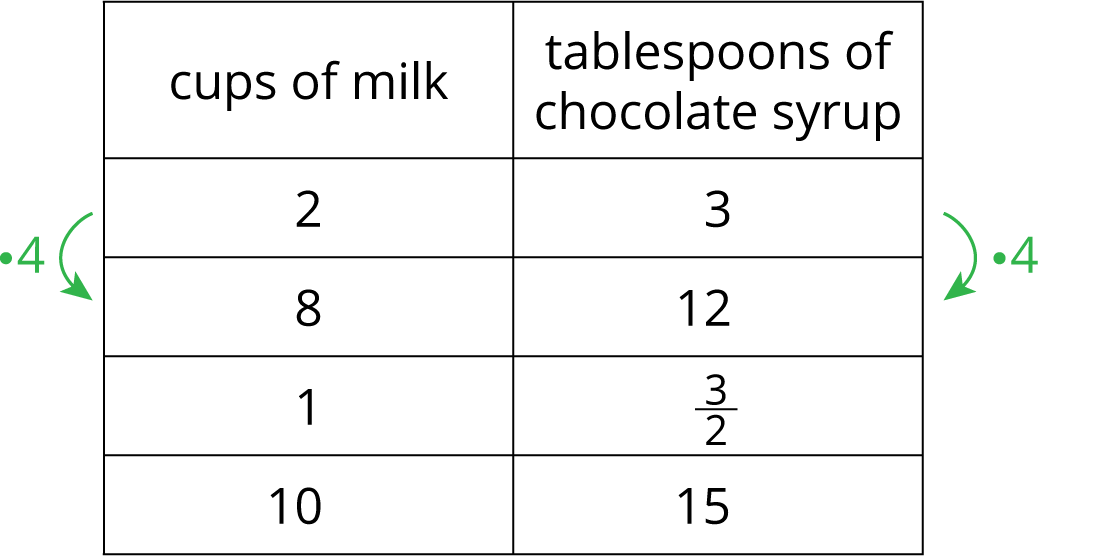
### Lesson 2 Practice Problems

1. When Han makes chocolate milk, he mixes 2 cups of milk with 3 tablespoons of chocolate syrup. Here is a table that shows how to make batches of different sizes. Use the information in the table to complete the statements. Some terms are used more than once.

* 
  1. The table shows a proportional relationship between \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  2. The scale factor shown is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  3. The constant of proportionality for this relationship is\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  4. The units for the constant of proportionality are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ per \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Bank of Terms: tablespoons of chocolate syrup, 4, cups of milk, cup of milk,

1. A certain shade of pink is created by adding 3 cups of red paint to 7 cups of white paint.
   1. How many cups of red paint should be added to 1 cup of white paint?

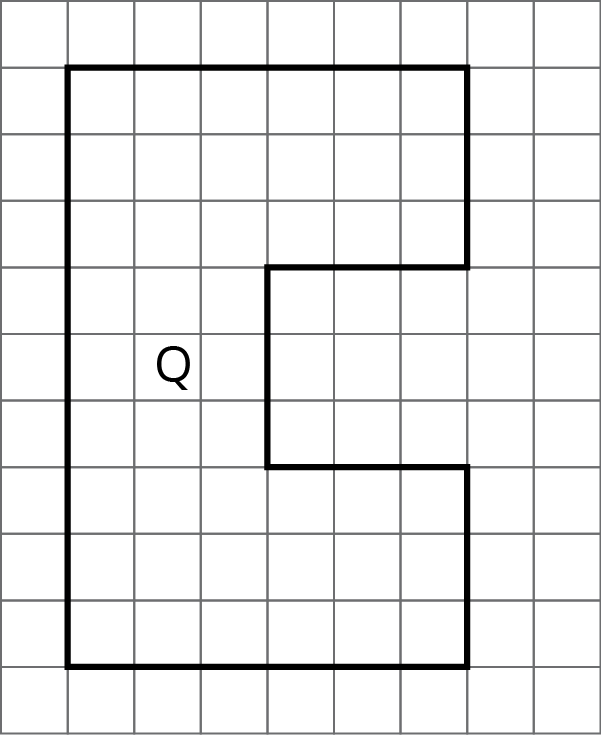
| * + cups of white paint | * + cups of red paint |
| --- | --- |
| * + 1 |  |
| * + 7 | * + 3 |

* 1. What is the constant of proportionality?

1. A map of a rectangular park has a length of 4 inches and a width of 6 inches. It uses a scale of 1 inch for every 30 miles.
   1. What is the actual area of the park? Show how you know.
   2. The map needs to be reproduced at a different scale so that it has an area of 6 square inches and can fit in a brochure. At what scale should the map be reproduced so that it fits on the brochure? Show your reasoning.

* (From Unit 1, Lesson 12.)

1. Noah drew a scaled copy of Polygon P and labeled it Polygon Q.

* 
* If the area of Polygon P is 5 square units, what scale factor did Noah apply to Polygon P to create Polygon Q? Explain or show how you know.
* (From Unit 1, Lesson 6.)

1. Select **all** the ratios that are equivalent to each other.



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