NAME _____ DATE _____ PERIOD _____

Unit 2, Lesson 2: Introducing Proportional Relationships with Tables

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.

cups of milk	tablespoons of chocolate syrup
2	3
8	12
1	$\frac{3}{2}$
10	15

•4 (left)   •4 (right)

Use the information in the table to complete the statements. Some terms are used more than once.

a. The table shows a proportional relationship between _____ and _____.

b. The scale factor shown is _____.

c. The constant of proportionality for this relationship is _____.

d. The units for the constant of proportionality are _____ per _____.

Bank of Terms: tablespoons of chocolate syrup, 4, cups of milk, cup of milk, $\frac{3}{2}$

2. A certain shade of pink is created by adding 3 cups of red paint to 7 cups of white paint.

a. 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

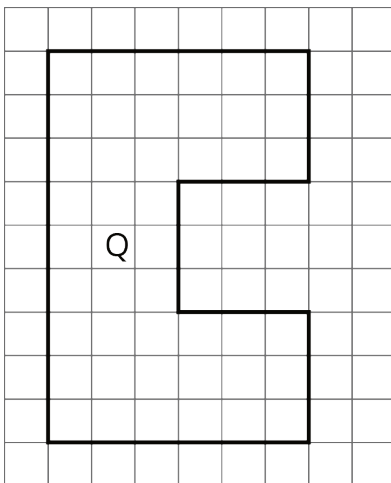NAME					DATE			PERIOD

b. What is the constant of proportionality?

3. 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.

a. What is the actual area of the park? Show how you know.

b. 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)

4. 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)

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

A. 4 : 7
B. 8 : 15
C. 16 : 28
D. 2 : 3

E. 20 : 35

(from Grade 7, Unit 2, Lesson 5)