

Equivalent Ratios

Lesson 2-11

DATE

TIME



Math Message

- 1 Circle the picture that shows 1 glass of milk for every 3 crackers. Then circle all the pictures that show the same ratio of milk to crackers.

A.



B.



C.



D.



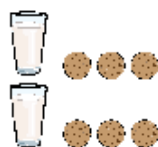
E.



F.

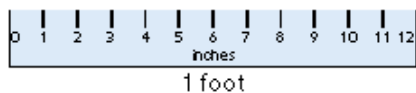


G.



Use the pictures to help you figure out the **equivalent ratios**.

2



Ratio of inches to feet:

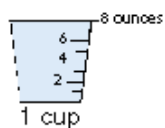
_____ inches : 1 foot

_____ inches : 2 feet

_____ inches : 5 feet

120 inches : _____ feet

3



Ratio of fluid ounces to cups:

_____ fluid ounces : 1 cup

_____ fluid ounces : 3 cups

_____ fluid ounces : 40 cups

48 fluid ounces : _____ cups

4



Ratio of boxes to packages:

_____ boxes : 1 package

_____ boxes : 3 packages

_____ boxes : 5 packages

42 boxes : _____ packages

Similar Rectangles

Lesson 2-11

DATE

TIME

Sort the rectangles into groups of rectangles that look similar. Measure the sides of the rectangles to the nearest centimeter. Record the measurements below.

Group 1

Letter of Rectangle			
Width (cm)			
Height (cm)			
Ratio of Width to Height			

Group 2

Letter of Rectangle			
Width (cm)			
Height (cm)			
Ratio of Width to Height			

Group 3

Letter of Rectangle			
Width (cm)			
Height (cm)			
Ratio of Width to Height			

Group 4

Letter of Rectangle			
Width (cm)			
Height (cm)			
Ratio of Width to Height			

Similar Rectangles (continued)

Lesson 2-11

DATE

TIME

Use the completed tables on the previous page to complete Problems 1–4.

- 1 Describe patterns that might help you decide whether rectangles are similar—that is, they have the same ratio for width to height.

- 2 How could you use this pattern to make another similar rectangle for one set of rectangles?

- 3 a. Which rectangle group that is NOT composed of squares has rectangles that are the “most square”?

- b. What makes them “most square”?

Try This

- 4 Come up with a set of three similar rectangles that are not similar to any of the rectangles recorded on journal page 92.

Record the dimensions of your rectangles below. Then record one ratio for width to height that describes all of them.

Rectangle 1 Width: _____ Height: _____

Rectangle 2 Width: _____ Height: _____

Rectangle 3 Width: _____ Height: _____

Ratio: _____



- 1 Create a dot plot for this data set.
Number of pets in households:

0, 1, 2, 1, 3, 4, 3, 2, 0, 0, 2, 1, 0



- 3 Gary bought $1\frac{3}{4}$ pounds of almonds. Each pound costs \$6. He plans to mix them with a $1\frac{1}{4}$ -pound bag of raisins. How much did Gary spend on almonds?

Number model: _____

Solution: _____



- 2 Divide.

a. $\frac{8}{9} \div \frac{3}{4} =$ _____

b. _____ $= \frac{7}{8} \div \frac{1}{3}$

c. $\frac{2}{3} \div \frac{1}{2} =$ _____

d. _____ $= \frac{8}{24} \div \frac{4}{24}$

- 4 Solve.

a. $20 \div (22 - 12) =$ _____

b. _____ $= 8 * (24 - 18)$

c. $120 \div (47 - 57) =$ _____

- 5 **Writing/Reasoning** For Problem 4b, explain how your answer would change if the parentheses were removed.