

1. Find the greatest common factor for each pair of numbers.

a.  $GCF(24, 36) =$  \_\_\_\_\_

b.  $GCF(27, 54) =$  \_\_\_\_\_

2. Find the least common multiple for each pair of numbers.

a.  $LCM(3, 8) =$  \_\_\_\_\_

b.  $LCM(6, 9) =$  \_\_\_\_\_

3. The Spartan soccer team has a game at 3:00 p.m. The Spartan soccer team scores a goal every 6 minutes and their opponent scores a goal every 8 minutes.

- a. At what time will the score be the same for both teams? \_\_\_\_\_

4. Mr. Moseley plants  $\frac{3}{4}$  of his garden with vegetables and  $\frac{1}{4}$  of it with flowers. He plants  $\frac{2}{3}$  of the flower section with daisies and the rest of the flower section with lilies.

- a. What fraction of the entire garden in daisies? \_\_\_\_\_

- b. Draw an area model and write a number sentence to represent the problem.

Number sentence: \_\_\_\_\_

5. Mrs. Sokolik is making 4 costumes for our Halloween party next year. Each costume requires  $2\frac{1}{2}$  yards of material.

- a. How many yards of material should Mrs. Sokolik buy? \_\_\_\_\_

- b. Draw a number-line model of the problem



6. Solve

a.  $\frac{6}{8} \div \frac{3}{4} =$  \_\_\_\_\_

b. \_\_\_\_\_  $= \frac{4}{5} \div \frac{4}{7}$

c. \_\_\_\_\_  $= \frac{8}{9} \div \frac{3}{15}$

d.  $3\frac{2}{5} \div \frac{3}{10} =$  \_\_\_\_\_

Use a preferred strategy for Problems 7-9.

7. If there is only  $\frac{2}{3}$  of a candy bar left, what fraction of the candy bar would each person get if 3 people wanted to split it evenly?

\_\_\_\_\_

Number sentence: \_\_\_\_\_

8. There are 5 white tiles for every 3 shaded tiles. There are 40 tiles in all. Draw a picture to represent the problem.

How many tiles are white? \_\_\_\_\_

How many tiles are shaded? \_\_\_\_\_

9.  $\frac{3}{5}$  cup of cereal is one serving. How many servings is 1 cup of cereal?

\_\_\_\_\_

Number sentence: \_\_\_\_\_

10. At the school carnival, there were 50 adults and 75 children.

- a. Using any ratio notation, write the ratio of adults to children.

\_\_\_\_\_

- b. Which expression(s) could be used to show the ratio of adults to TOTAL people at the carnival?  
Check ALL that apply.

\_\_\_\_\_ 100 to 75

\_\_\_\_\_  $\frac{2}{5}$

\_\_\_\_\_  $\frac{2}{3}$

\_\_\_\_\_ 50 and 75

\_\_\_\_\_ 50

\_\_\_\_\_ 50 : 125

11. Tommy collects stamps. He has 5 presidential stamps for every 6 holiday stamps. He has a total of 55 stamps. How many stamps are presidential stamps?

a. Use a drawing or diagram to represent the problem.

b. Describe how your picture or diagram represents the problem.

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c. Solve the problem. Answer: \_\_\_\_\_

12. Mr. Ruth goes to the animal shelter to give treats to the animals there. He gives the same number of treats to each animal in the shelter. Last week he visited 6 animals and he used 24 treats. Make a ratio/rate table to answer the following questions.

- a. How many treats does Mr. Ruth give 1 animal? \_\_\_\_\_
- b. How many animals can he feed with 60 treats? \_\_\_\_\_
- c. How many treats would he use for 75 animals? \_\_\_\_\_
- d. How many animals can he feed with 32 treats? \_\_\_\_\_
- e. How many treats would he need to feed 23 animals? \_\_\_\_\_
- f. Explain how you used the ratio/rate table to solve Problem 12e.

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13. A university has a student-faculty ratio of 15 : 1. Make a ratio/rate table to answer the following questions.

- a. How many students are there for 2 faculty members? \_\_\_\_\_
- b. How many faculty members are there for 150 students? \_\_\_\_\_
- c. How many students are there for 50 faculty members? \_\_\_\_\_
- d. How many faculty members are there for 6,750 students? \_\_\_\_\_
- e. Explain how you used the ratio/rate table to solve Problem 13d/

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14. Mr. Barber's car used 9 gallons of gas to drive 288 miles.

- a. What is the unit rate for miles per gallon? \_\_\_\_\_
- b. What does this unit rate represent?

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- c. Draw a ratio/rate table to show how much gas Mr. Barber's car used to travel these distances: 256 miles to grandma's house; 1,248 miles to Walt Disney World.

- d. Mrs. Merrill's car used 12 gallons to drive 420 miles.

Whose car goes farther on 1 gallon of gas? \_\_\_\_\_

How do you know? \_\_\_\_\_  
\_\_\_\_\_