

NAME _____

DATE _____

PERIOD _____

Lesson 3 Reteach

Rates

A **rate** is a ratio of two measurements having different kinds of units. When a rate is simplified so that it has a denominator of 1, it is called a **unit rate**.

Example 1

Use a bar diagram to show the ratio *20 students to 5 computers* as a unit rate.

-----20 students-----			
1 computer	1 computer	1 computer	1 computer
4 students			

The bar diagram shows the number of students divided by the number of computers. It represents the number of students per computer.

The ratio written as a unit rate is *4 students to 1 computer*.

You can also find a unit rate by dividing.

Example 2

Benito ate 48 raisins in 8 minutes. How many raisins did he eat per minute, if he ate the same number each minute?

$$\frac{48 \text{ raisins}}{8 \text{ minutes}} = \frac{6 \text{ raisins}}{1 \text{ minute}}$$

$\div 8$ (above the fraction bar)
 $\div 8$ (below the fraction bar)

Divide the numerator and denominator by 8 to get a denominator of 1.

The unit rate is 6 raisins per minute.

Exercises

Write each rate as a unit rate.

- 6 eggs for 3 people
- \$12 for 4 pounds
- 40 pages in 8 days
- GROCERIES** Mr. Gonzalez spends \$135 for 5 bags of groceries. How much does he spend per bag of groceries, if each bag costs the same?
- TRAIN** Ms. Terry travels by train to see famous theme parks. She travels a distance of 728 miles in 8 hours. If the train maintains a constant speed, how many miles does she travel in one hour?
- FOOTBALL** A quarterback throws 222 yards in 6 games. How many yards does he throw in one game if he throws the same amount in each game?

Lesson 3 Skills Practice

Rates

Write each rate as a unit rate.

1. 14 hours in 2 weeks
2. 36 pieces of candy for 6 children
3. 8 teaspoons for 4 cups
4. 8 tomatoes for \$2
5. \$28 for 4 hours
6. 150 miles in 3 hours
7. \$18 for 3 CDs
8. 48 logs on 6 trucks
9. Write the ratio *\$12 dollars for 3 tickets* as a unit rate.
10. **CHORES** Wayne raked 30 bags of leaves in 3 hours. If he raked the same number of bags each hour, how many bags of leaves did he rake in one hour?
11. **QUIZZES** Mr. Ordonez gives his math students 34 quizzes during 17 weeks of school. If he gave the same number of quizzes each week, how many quizzes does Mr. Ordonez give his students every week?
12. **TOURS** It cost Mrs. Sapanaro \$245 for her and 6 people to take a day-long guided tour of the Everglades. How much does the guided tour cost per person?
13. **RUNNING** Stephanie ran 1 lap in 6 minutes. At this rate, how far would she run in 30 minutes?
14. **ALTITUDE** In general, the air temperature decreases 12°F for every 4,000 feet increase in altitude. If a hiker climbs 3,000 feet, by how much can she expect the temperature to decrease?
15. **PURCHASES** One bottle of shampoo costs \$6 for 8 ounces. A second bottle costs \$4 for 5 ounces of shampoo. Which has the lower unit rate? How much lower?