Name

5-5B Lesson Master

USES) Objective G

- 1. Gavin practices his guitar for $1\frac{1}{4}$ hours while Claire practices her guitar for 90 minutes. Write a ratio comparing Gavin's practice time to Claire's practice time.
- Joel has planted 10 plants in the same time Rene has planted 14 plants. Write a ratio comparing the number of plants Joel has planted to the number of plants Rene has planted.
- **3.** Celeste plans to make a dress for herself and a matching dress for her little girl. Celeste's dress uses $3\frac{1}{2}$ yards of fabric and her little girl's dress uses 2 yards. What is the ratio of the yardage for Celeste's dress to that of her daughter's dress?
- 4. Kerry is an attorney who earns an annual income of \$75,000. His annual household expenses are \$64,000. After ten years, if Kerry earns an annual income of \$150,000, what can he expect to spend for household expenses if the ratio of his income and expenses remains the same?
- **5.** A local restaurant has 6 waiters and 9 waitresses. The manager wants to hire 10 more wait staff. How many of each can she hire to keep the ratio of the number of waiters to the number of waitresses the same?
- 6. You can purchase a child's digital camera for \$59.99 online. Its list price is \$69.99. What is the discount rate of the online price?
- 7. Juliet purchased some plants for \$29.99 from a nursery catalog. Her total with shipping was \$38.49. If her next order is \$59.98 and the shipping rate remains the same, what is the total cost of her next order?
- **8.** Geoffrey purchased four tires for \$416, before tax. His total with tax was \$444.08. What is the tax rate?

See pages 320–323 for objectives.

Name

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- **9.** Chloe paid \$21.18 for a large pizza including tax and delivery fees. She gave the delivery person \$25 and told the delivery person to keep the change. Did she give the delivery person a 20% tip? Explain.
- **10**. A custom paint shop uses 3 liters of paint for Martin's car. The shop uses 2 parts yellow paint to 3 parts blue paint to make green paint. How many liters of each color did the shop use?
- **11.** For a school bake sale, Amanda made cookies that use twice as many colored candies as chocolate chips. If she used 9 bags of candies and chips, how many bags of each did she use?
- **12.** Wilson wants to use 3 parts of Kentucky blue grass, 3 parts of red fescue, and 4 parts of perennial rye grass to seed his new lawn. How many pounds of each type of grass will he use if he uses a total of fifteen 2-pound bags of grass seed?
- **13.** Julia made a trail mix for her hiking trip that contained 2 parts nuts, 1 part raisins, and 5 parts granola. How much of each ingredient should she use if she wants to make 4 cups of the trail mix?
- 14. A 14-carat gold bracelet is composed of 29 parts pure gold and 21 parts of another metal. It takes 2 ounces of this gold alloy to create the bracelet. How many ounces of pure gold and ounces of another metal are used to create this bracelet?
- **15.** The basketball team has won 21 games and lost 15 games. How many future games can they lose and still keep their winning percentage above 0.500?
- **16.** Carmine is 11 years old and Alexis is 3 years old. In how many years will Carmine be twice as old as Alexis?
- **17.** A 12-inch square pizza costs \$12.50. If the unit cost stays the same, what will be the cost for a 16-inch square pizza?