

Chapter 5

Write each rate or ratio as a fraction in lowest terms.

Change to the same units when necessary.

1. 14 days to 58 days. 1. _____
2. 600 miles in 15 hours. 2. _____
3. \$25 for 425 minutes 3. _____
4. The lecture hall seats 420 people. The classroom seats 60 people. Find the ratio of lecture hall seats to classroom seats. 4. _____
5. Compare in inches: 8 feet to 56 inches. 5. _____
6. Compare in nickels: 30 dimes to 16 quarters. 6. _____
7. Find the best buy on canned corn. You have a coupon for 35¢ off Brand A and a coupon for 50¢ off Brand C. 7. _____
 - 30 ounces of Brand A for \$1.39
 - 48 ounces of Brand B for \$1.49
 - 64 ounces of Brand C for \$2.79

Determine whether each proportion is true or false.

8. $\frac{32}{18} = \frac{48}{27}$ 8. _____
9. $\frac{.26}{.39} = \frac{1.3}{1.9}$ 9. _____

Find the unknown number in each proportion.

10. $\frac{99}{55} = \frac{44}{x}$ 10. _____
11. $\frac{14}{18} = \frac{49}{x}$ 11. _____
12. $\frac{3.6}{x} = \frac{.7}{9.8}$ 12. _____
13. $\frac{9}{x} = \frac{15}{1\frac{2}{3}}$ 13. _____

Set up and solve a proportion for each application problem.

14. A car can travel 212 miles on 16 gallons of gas. 14. _____
How far can it travel on 25 gallons of gas?

15. A truck rental costs \$125.98 for 3 days. How much will it cost to rent a truck for 7 days? 15. _____
16. 4 out of 7 students take a math class. Out of 490 students, how many take a math class? 16. _____
17. In a 30-foot pole casts a 12-foot shadow, what is the height of a pole that casts a 15-foot shadow? 17. _____
18. If 1 inch on a blueprint represents 7 feet of actual length, what is the actual length of a wall that is $8\frac{1}{2}$ inches on the blueprint? 18. _____
19. Define in your own words a proportion.
20. Is it possible for the ratio of income tax to income to be greater than 1? Explain your answer.