

2-6**Practice**

Form G

Ratios, Rates, and Conversions**Convert the given amount to the given unit.**

1. 15 days; hours
 2. 60 ft; yd
 3. 100 meters; cm
 4. 5 hr; min
 5. 12 meters; ft
 6. 16 in.; cm
 7. 5 liters; qt
 8. 2076 cm; yd
 9. 15 pounds; grams
 10. 25 km; cm
 11. 3 mi; ft
 12. 60 min; s
13. The builder measures the perimeter of the foundation to be 425 ft. He must order steel beams to install around the perimeter of the foundation. Steel must be ordered in meters. How many meters of steel should the builder order?
14. Mrs. Jacobsen purchased a 5-pound package of ground beef for \$12.40. She decided to use 8 ounces each day for dinner recipes. What was the cost of ground beef per meal?
15. Car 1 drove 408 miles in 6 hours and Car 2 drove 365 miles in 5 hours during the cross-country road race. Who had the fastest average speed?

Copy and complete each statement.

16. 25 mi/hr = ___ m/min
17. 32 mi/gal = ___ km/L
18. 10 m/s = ___ ft/s
19. 14 gal/s = ___ qt/min
20. 3.5 days = ___ min
21. 100 yd = ___ m
22. 15 dollars/hr = ___ cents/min
23. 5 L/s = ___ kL/min
24. 62 in. = ___ m
25. 7 days = ___ s

2-6**Practice** (continued)

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Ratios, Rates, and Conversions

26. Which weighs more, 500 pounds or 200 kilograms?
27. Which is longer, 4000 ft or 1 kilometer?
28. Which is the better buy, 7 pounds for \$8.47 or 9 pounds for \$11.07? Explain.
29. A runner is running 10 miles per hour.
- What conversion factors should be used to convert 10 mi/hr to ft/s?
 - How many feet per second is the runner running?

Determine if each rate is a unit rate. Explain.

30. \$1.99 per pound 31. 100 feet per 2 seconds 32. 22 miles per gallon

Find each unit rate.

33. 4 pounds of green peppers cost \$7.56.
34. Rahul travelled 348 miles in 6 hours.
35. Cheryl assembled 128 chairs in 16 hours.
36. **Writing** Suppose you want to convert feet per second to miles per hour. What conversion factors would you use? How did you determine which unit should go in the numerator and which unit should go in the denominator of the conversion factors?
37. The volume of a box is 1344 cubic inches or in^3 .
- How many cubic inches are in one cubic foot? Justify your answer.
 - What is the volume of the box in cubic feet? Justify your answer.