2-6 pg. 121 #9-15, 23, 25, 27-29, 34, 35, 37-39

9. Running Trisha ran 10 km in 2.5 h. Jason ran 7.5 km in 2 h. Olga ran 9.5 km in 2.25 h. Who had the fastest average speed?

10. Population Bellingham, Washington, had an area of 25.4 mi^2 and a population of 74,547 during one year. Bakersfield, California, had an area of 113.1 mi^2 and a population of 295,536 during the same year. Which city had a greater number of people per square mile?

Convert the given amount to the given unit.

11. 63 yd; feet

12. 168 h; days

13. 2.5 lb; ounces

14. 200 cm; meters

15. 4 min; seconds

23. Maintenance The janitor at a school discovered a slow leak in a pipe. The janitor found that it was leaking at a rate of 4 fl oz per minute. How fast was the pipe leaking in gallons per hour?

Copy and complete each statement.

25. 7 ft 3 in. = ■ in.

27. 2.5 h = ■ min

28. 2 qt/min = ■ gal/s

29. 75 cents/h = ■ dollars/day

34. Think About a Plan A college student is considering a subscription to a social-networking Internet site that advertises its cost as "only 87 cents per day." What is the cost of membership in dollars per year?
- How many conversion factors will you need to use to solve the problem?
- How do you choose the appropriate conversion factors?

35. Recipes Recipe A makes 5 dinner rolls using 1 c of flour. Recipe B makes 24 rolls using $7\frac{1}{2}$ c of flour. Recipe C makes 45 rolls using 10 c of flour. Which recipe requires the most flour per roll?

37. Writing Suppose you want to convert kilometers to miles. Which unit should be in the numerator of the conversion factor? Which unit should be in the denominator? Explain how you know.

38. Reasoning Without performing the conversion, determine whether the number of new units will be greater or less than the number of original units.
- **a.** 3 min 20 s converted to seconds
- **b.** 23 cm converted to inches
- **c.** kilometers per hour converted to miles per hour

39. Exchange Rates The table below shows some exchange rates on a particular day. If a sweater sells for $39.95 in U.S. dollars, what should its price be in rupees and pounds?

U.S. DOLLARS	1.00
INDIAN RUPEES	39.57
ALGERIAN DINARS	64.15
BRITISH POUNDS	.50