Name _____ Class _____ Date _____

Chapter Test — Form A

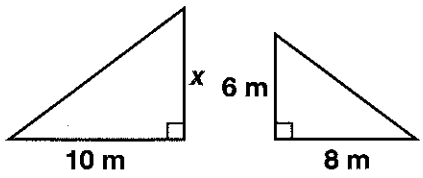
Chapter 4

Solve each proportion.

1. $\frac{t}{4} = \frac{15}{10}$
2. $\frac{-6}{8} = \frac{p}{12}$
3. $\frac{8}{7} = \frac{c}{14}$
4. $\frac{2.1}{6} = \frac{x}{4}$
5. $\frac{2}{1.2} = \frac{5}{k}$
6. $\frac{4}{7} = \frac{d}{28}$
7. $\frac{f}{8} = \frac{9}{18}$
8. $\frac{g}{20} = \frac{12}{48}$

Write an equation and solve.

9. What is 35% of 360?
10. 12 is what percent of 15?
11. 18 is 80% of what number?
12. What percent of 80 is 24?
13. Suppose you invested $1200 for six years. You earned $396 in simple interest at the end of six years. What is the annual interest rate?
14. Last year, 460 seniors graduated from one high school. Seventy-five percent went on to college. How many seniors went on to college?
15. The scale of a map is 1 cm : 50 mi. Determine the distance between two cities that are 4.2 cm apart on the map.
16. The pair of figures is similar. Find the length of x.



Find each percent of change. Describe the percent of change as an increase or decrease.

17. 25 ft to 15 ft
18. 75 cm to 60 cm
19. 180 in. to 201.6 in.
20. In 1995, the total number of cars produced in the United States was 11,985,000. In 2000, the number of cars produced jumped to 12,855,000. Find the percent of change.
21. The U.S. Consumer Price Index for all urban consumers (CPI-U) based on the prices of all items for the second half of 1999 was 167.8. For the first half of 2000, the CPI-U increased to 170.7. Find the percent of change.
Source: *The World Almanac and Book of Facts, 2001*

Name _____ Class _____ Date _____

Chapter Test (continued) Form A

Chapter 4

22. The ratio of the number of right-handed students to left-handed students is $\frac{11}{2}$. If there are 38 left-handed students, how many students are right-handed?

23. **Writing** Give an example of two independent events, and explain why they are independent.

24. A coin is tossed three times. What is the probability of getting 3 tails in a row?

25. A bank contains four dimes, seven nickels, and three quarters. Two coins are selected at random. Find each probability.
- **a.** *P*(quarter and quarter) with replacing
- **b.** *P*(dime then nickel) without replacing
- **c.** *P*(dime and quarter) with replacing
- **d.** *P*(quarter then quarter) without replacing

Complete each statement.

26. \$3.48/2 lbs = \$_____ /lb

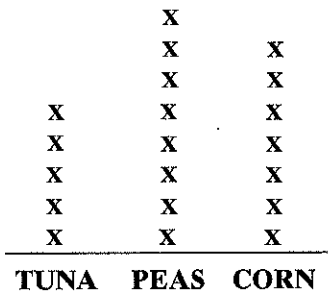
27. 4 qt/min = _____ gal/h

28. 65 mi/h = _____ ft/min

29. 3 m/s = _____ km/min

30. **Open-Ended** Write and solve a percent problem that describes a situation in which you have used percents.

Cans of food were selected at random from a box. Use the data in the line plot to find each probability.



31. *P*(tuna)

32. *P*(corn or peas)

33. *P*(not corn)

34. The length of a pair of scissors measures 17.6 cm. Find the percent error in your measurement.

35. A 4-ft tall girl casts a shadow 8 ft long. She is standing next to a tree that casts a 24-ft shadow. How tall is the tree?