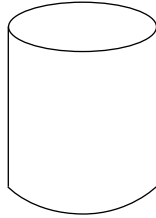


Chapters 1–13 Final Mastery Test

Directions Circle the letter of the best answer.

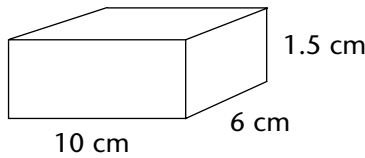
1. The figure shown is a

A cone
B cylinder
C pyramid
D sphere



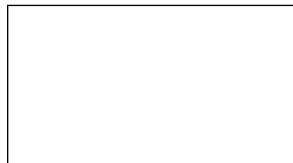
2. The volume of the rectangular prism shown is

A 17.5 cm^3
B 70 cm^3
C 81 cm^3
D 90 cm^3



3. Which statement is true for the rectangle shown?

6 in.

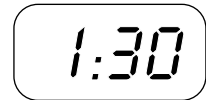


9 in.

- A** Perimeter is 30 inches and area is 54 inches.
B Perimeter is 30 inches and area is 54 square inches.
C Perimeter is 15 inches and area is 54 inches.
D Perimeter is 15 inches and area is 54 square inches.
4. 35% of ___ is 175. What number completes the sentence?
A 5
B 61.25
C 500
D 612.5

5. Jacob arrived at work Tuesday morning at 6:45. He left for lunch at the time shown on the clock below. How long did Jacob work Tuesday before leaving for lunch?

A 5 hours 15 minutes
B 5 hours 45 minutes
C 6 hours 15 minutes
D 6 hours 45 minutes



6. One hundred people were asked to name their favorite holiday. The results of the survey are going to be presented in a circle graph. Of the 100 people surveyed, 30 selected Thanksgiving. How big an angle should the sector for Thanksgiving have in the circle graph?

A 108°
B 90°
C 70°
D 30°

7. A scale of 1:12 is used to make a scale drawing of a sled. The drawing is 4 inches long. The actual length of the sled is

A 16 feet
B 8 feet
C 4 feet
D 3 feet

8. Solve for n : $5n + 10 = 5$

A $n = 3$
B $n = 1$
C $n = -1$
D $n = -3$

Chapters 1–13 Final Mastery Test, continued

Directions Solve the following problems.

- 9.** Write this numeral in words:

601,012 _____

- 10.** Round 24,995 to the nearest thousands. _____

- 11.** Mia has 1,756 rocks in her collection. She gives away 588 to her cousin.

How many rocks does she have left? _____

- 12.** 433 times 306. _____

- 13.** Divide 53 into 21,730. _____

- 14.** Circle the prime numbers.

2 3 6 27 57 53 117 45

- 15.** Find the GCF of the pair of numbers (27, 36). _____

- 16.** Tell if the first fraction is less than or greater than the second fraction.

Use < or >.

$\frac{7}{16}$ $\frac{3}{7}$

- 17.** What is this fraction in simplest form? _____

$\frac{75}{156}$

- 18.** $6\frac{1}{2} \div \frac{1}{2}$ _____

- 19.** Write whether the first decimal is greater than or less than the second.

Use < or >.

6.39 6.391

- 20.** 32.9×0.0303 _____

- 21.** $1,190.845 \div 410$ _____

- 22.** Write this number in scientific notation.

6,403,228,000 _____

- 23.** Harold checked out 19 books from the library. Magda and Teri checked out 57 books. Write a ratio for the number of books as a fraction in simplest form. _____

Chapters 1–13 Final Mastery Test, continued

24. Tell whether this ratio forms a proportion. Use = or ≠.

$$\frac{12}{8} \qquad \frac{9}{6}$$

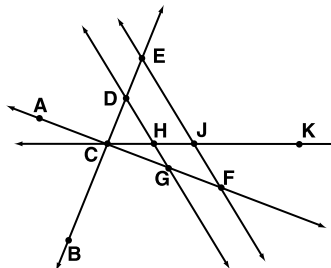
25. If one Euro mark equals 88¢, how many U.S. dollars are in 5,016 Euros?

26. Rename as a percent.

$$16 \frac{1}{2}$$

27. Sharon’s goal is to walk 80 miles this summer. So far, she has walked 14 miles. What percent of her goal has she achieved?

Directions Look at the diagram to answer questions 28 and 29.



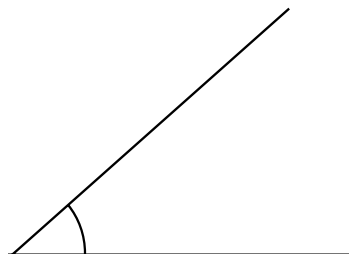
28. Which two lines are parallel?

29. At what point do lines \overleftrightarrow{BE} and \overleftrightarrow{FA} intersect?

Directions Answer the questions.

30. Use your protractor to measure the angle.

_____°

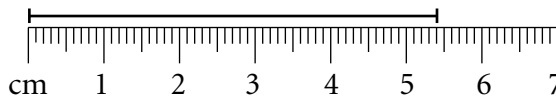


31. Look at the sides of the triangle. Write what kind of triangle it is.



32. Write the name of the solid figure with a curved surface in which all points on the surface are equal distance from the center.

33. How long is this line segment to the nearest mm?



34. Which is the best measurement for the width of a door?

- 1 mm 1 cm 1 m 1 km

Chapters 1–13 Final Mastery Test, continued

Directions For questions 35–37, fill in the missing numbers.

35. 39 cm = _____ mm **36.** 1,440 g = _____ kg **37.** 569 mL = _____ L

Directions For questions 38–41, fill in the missing numbers.

38. 4 gallons = _____ pints **40.** 60 inches = _____ feet

39. 2 tons = _____ pounds **41.** 18 feet = _____ yards

Directions Answer the questions.

42. Yvonne’s yard measures 38 m by 52 m.

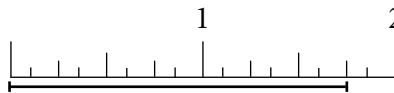
What is the area of the yard?

43. A construction crew has dug a hole for a building’s foundation.

The hole is 16 m deep, 45 m long, and 40 m wide. What is its volume?

44. A container is 17 cm by 4 cm by 8 cm. What is the container’s capacity in liters?

45. How long is this line segment to the nearest $\frac{1}{8}$ inch?



46. One city block is 440 feet long and 375 feet wide. What is its perimeter?

47. Another city block is 264 feet wide and 1,056 feet long. What is its area?

48. A rectangular prism is $3\frac{1}{2}$ inches long, 3 inches wide, and $2\frac{1}{2}$ inches high. What is its volume?

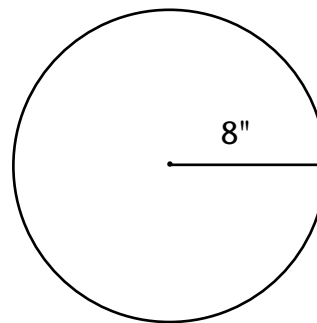
Directions Use the circle to answer questions 49–52.

49. What is the diameter of the circle?

50. What is the circumference of the circle?

51. What is the area of the circle?

52. A tin can has a radius of 4 inches, and a height of 6 inches. Pi equals 3.14. What is its volume?



$\pi = 3.14$


Chapters 1–13 Final Mastery Test, continued

Directions Find the answers.

53. $34 \text{ min. } 17 \text{ sec.}$
 $- 6 \text{ min. } 22 \text{ sec.}$

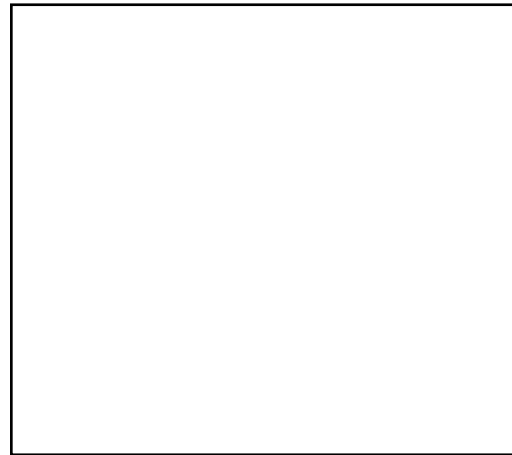
54. $7 \text{ yr. } 38 \text{ wk. } 4 \text{ days}$
 $- 2 \text{ yr. } 50 \text{ wk. } 5 \text{ days}$

55. Bhaktir arrives at work at 8:04 A.M. Normally, he leaves at 3:57 P.M.
 How long will he be at work? _____

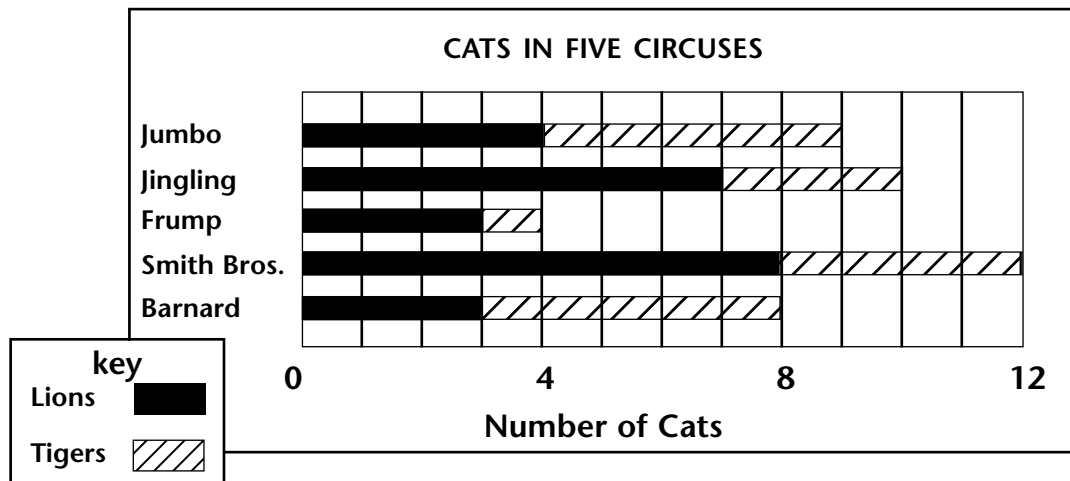
56. If  represents 2 books, how many book symbols would you draw to show 13 books? _____

57. Make a vertical bar graph to show the information in the chart.

Corrine's Test Scores	
Test 1	90
Test 2	85
Test 3	80
Test 4	95



Directions Use the divided bar graph to answer questions 58–59.



58. How many lions are there altogether? _____

59. Which two circuses have the same number of tigers? _____

Chapters 1–13 Final Mastery Test, continued

Directions Answer the questions.

- 60.** Instead of bars, what does a line graph use to show change over a period of time? _____

- 61.** Fill in the chart. Show how many degrees would be in a circle's sector that is as big as the part indicated. _____

35%	$\frac{1}{12}$	55%	$7\frac{1}{2}\%$	$\frac{2}{9}$
_____	_____	_____	_____	_____

- 62.** Does an accurate graph always have a picture? _____

- 63.** A model airplane is built to a scale of 1:48. If the real airplane is 14 feet long, how long is the model? Give your answer in inches. _____

- 64.** Use your ruler to measure the drawing to the nearest $\frac{1}{8}$ inch. Then find the length of the real rabbit. _____



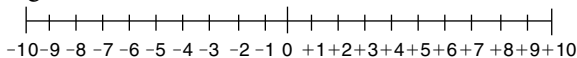
- 65.** A room on a floor plan measures $1\frac{1}{4}$ inches by $1\frac{3}{8}$ inches. The scale on the floor plan is 1 inch = 8 feet. What is the area of the real room? _____

- 66.** Square-foot tiles cost \$1.33 each. How much will it cost to tile the room in question 65? _____

- 67.** A line between two cities on a map is $2\frac{3}{8}$ inches long. The scale on the map is 1 inch = 32 miles. How long is the real distance between the two cities? _____

- 68.** Use the number line to help you answer question 68. _____

Begin at -4 . Move -4 . Move $+9$.



- 69.** Which integer is greater? Use $<$ or $>$.
 $+3$ -9 _____

- 70.** Write the absolute value. $|274|$ _____

71. $-7 + (-3)$ _____

73. $-3 \times (+10)$ _____

72. $+4 + (-6)$ _____

74. $-16 \div (-4)$ _____

Directions Find the unknown number.

75. $4 \times b = -32$

$b =$ _____