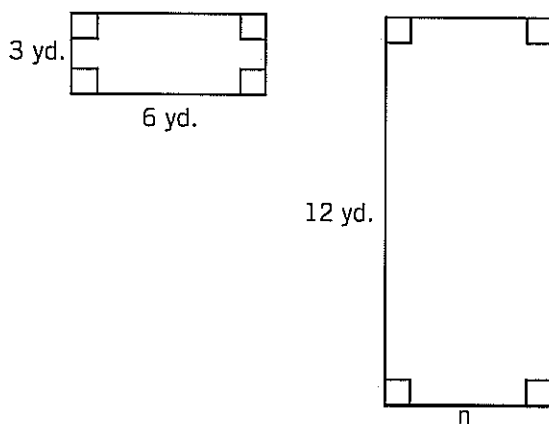


The pair of figures is similar. Find the missing side n . Round to the nearest tenth when necessary.

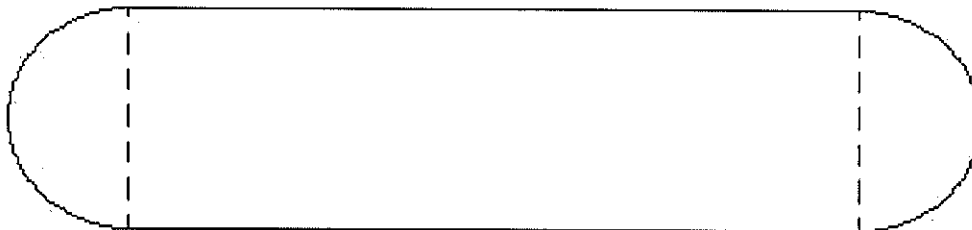
80.



- a. $n = 1.5$ yd
- b. $n = 24$ yd
- c. $n = 0.5$ yd
- d. $n = 6$ yd

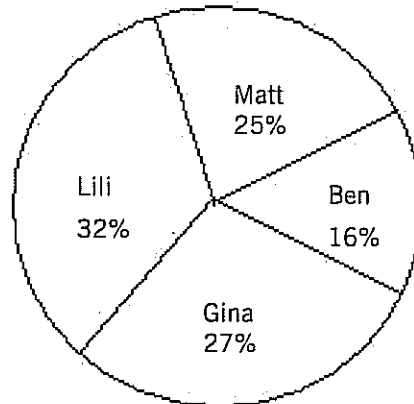
Solve.

81. The rectangular part of the field shown below is 160 yd long and the diameter of each semicircle is 12 yd. How much will it cost to fertilize the field at \$0.25 per square yard? Use $\pi \approx 3.14$ and round to the nearest cent.



- a. \$593.04
- b. \$508.26
- c. \$268.26
- d. \$484.71

The circle graph shows the results of the student council presidential election. The complete circular area represents 100% of the votes.



700 total votes

The circle graph shows what percent of the vote each person received.

82. Who got the fewest votes?

- a. Matt
- b. Lili
- c. Ben
- d. Gina

Find the grade point average. Round to the nearest tenth when necessary.

83. The grades are given for a student for a particular semester. Find the grade point average. Assume the grade point values are A = 4, B = 3, C = 2, D = 1, and F = 0.

Grade	Credit Hours
B	4
D	3
F	3
D	4
D	4

- a. 18
- b. 1.3
- c. 1.2
- d. 3.6

Find the median. Round to the nearest tenth when necessary.

84. The numbers of vehicles passing through a toll booth in one hour for five consecutive hours are as follows: 7, 16, 25, 34, 40

- a. Median = 16 vehicles
- b. Median = 25 vehicles
- c. Median = 34 vehicles
- d. Median = 26.1 vehicles

85. A national safety organization records the number of motor vehicle accidents that take place each year in a certain country. An example of this data is recorded in the following chart. Determine the median number of accidents that occur per year based on this data.

Year	2007	2008	2009	2010
Approximate Number of Accidents	10,800,000	9,800,000	11,100,000	10,400,000

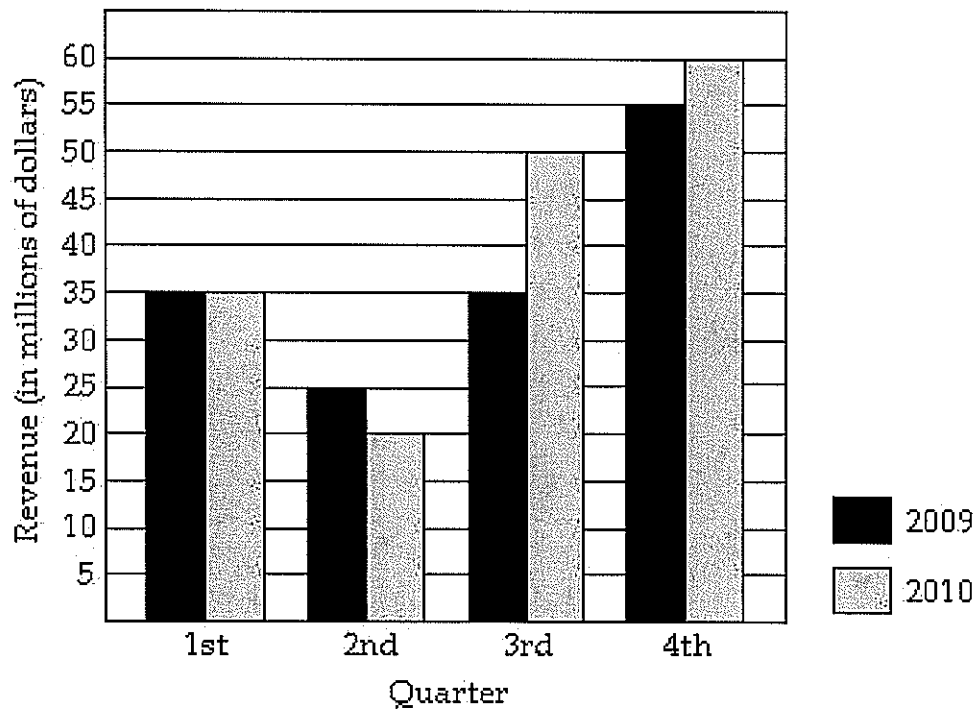
- a. 10,600,000
- b. 10,800,000
- c. 11,600,000
- d. 10,400,000

Find the mode.

86. The last seven computer games sold at the local electronics store cost \$20, \$33, \$46, \$33, \$49, \$33, \$49.

- a. The mode is \$37.60.
- b. The mode is \$46.
- c. The mode is \$33.
- d. The mode is \$49.

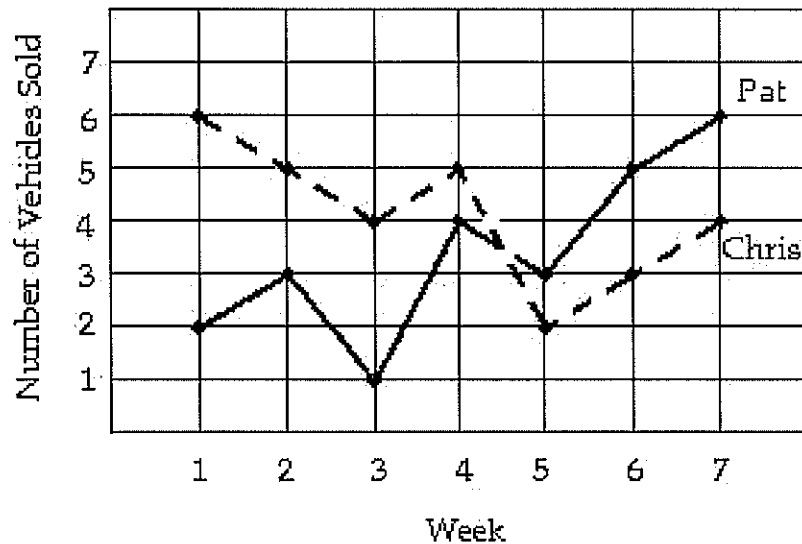
The following double-bar graph illustrates the revenue for a company for the four quarters of the year for two different years. Use the graph to answer the question.



87. How much more revenue was generated from 2009 to 2010 in the fourth quarter?

- a. \$10,000,000
- b. \$15,000,000
- c. \$1,000,000
- d. \$5,000,000

The following comparison line graph indicates the number of vehicles sold for a seven week period by two different salespeople. Use the graph to answer the question.



88. How many vehicles did Chris sell in the sixth week?

- a. 4 vehicles
- b. 5 vehicles
- c. 2 vehicles
- d. 3 vehicles

Add.

89. $21 + (-68)$

- a. -47
- b. 89
- c. -89
- d. 47

Subtract.

90. $(1/4) - (1/6)$

- a. $-(1/12)$
- b. $(1/24)$
- c. $(1/12)$
- d. $-(1/2)$

Perform the set of operations, working from left to right.

91. $-4 + 20 - 6 - (-18) + (-11)$

- a. -19
- b. 17
- c. -25
- d. -7

Multiply or divide.

92. $(5.04 \div -9)$

- a. -5.6
- b. -0.56
- c. -1.56
- d. 5.6

Write in scientific notation.

93. 550,000

- a. 5.5×10 to power of (-6)
- b. 5.5×10 to power of (6)
- c. 5.5×10 to power of (5)
- d. 5.5×10 to power of (-5)

Write in standard notation.

94. 6.756×10 to power of (7)

- a. 6,756,000
- b. 472.92
- c. 675,600,000
- d. 67,560,000

Solve for the variable.

95. $1.2x = 0.06$

- a. 0.005
- b. 0.0005
- c. 0.5
- d. 0.05

Solve.

96. $-10x - 24 = -15x - 7x$

- a. 0
- b. 2
- c. 4
- d. -2

97. A hardware store took an inventory of its paint. They had 2.5 times as many gallons of red paint as of blue paint. They had 18 more gallons of yellow paint than red paint. Taken together, the red, yellow and blue paint came to 342 gallons. How many gallons of blue paint were there? Round to the nearest gallon.

- a. 14 gallons
- b. 54 gallons
- c. 90 gallons
- d. 86 gallons

98. To trim the edges of a rectangular table cloth, 42 feet of lace are needed. The length of the table cloth is exactly one-half its width. What are the dimensions of the table cloth?

- a. length: 14 ft; width: 7 ft
- b. length: 14 ft; width: 28 ft
- c. length: 7 ft; width: 14 ft
- d. length: $3\frac{1}{2}$ ft; width: 7 ft

99. A saleswoman in a leather store earns \$2700 per month base pay plus a commission on sales. One month she earns \$5612 on sales of \$41,600. What percent is her commission?

- a. 6%
- b. 7.5%
- c. 7%
- d. 6.5%

Solve for the variable.

100. $-(\frac{1}{2})x = (\frac{2}{3})$

- a. $-(\frac{4}{3})$
- b. 4
- c. $(\frac{4}{3})$
- d. $-(\frac{3}{4})$