

Student Name: _____

Class: _____

Date: _____

Instructions: **Read each question carefully and circle the correct answer.**

1. What is the value of b ?

$$b - 57 + 42 = 60$$

- A. 75
- B. 159
- C. -15
- D. -39

2. Solve for y .

$$18 + y = 45$$

- A. $y = -27$
- B. $y = 27$
- C. $y = -63$
- D. $y = 63$

3. What is the value of m ?

$$m + (7.8 - 1.2) = 54.2$$

- A. - 47.6
- B. 45.2
- C. 47.6
- D. 60.8

4. Solve for x.

$$\frac{x}{5} = -15$$

- A. $x = -3$
- B. $x = 3$
- C. $x = -75$
- D. $x = 75$

5. Solve for q.

$$-\frac{q}{3} = 72$$

- A. 24
- B. -24
- C. 216
- D. -216

6. Solve for t.

$$7t = -56$$

- A. $t = -392$
- B. $t = 392$
- C. $t = -8$
- D. $t = 8$

7. Evaluate the expression with $a = -11$.

$$(5a - 3) - (8a - 6)$$

- A. -140
- B. -152
- C. 24
- D. 36

8. Solve for x.

$$15 - (2x - 4) = 5$$

- A. $x = -3$
- B. $x = 3$
- C. $x = -7$
- D. $x = 7$

9. Solve for y.

$$4 - (y + 9) = 10$$

- A. $y = 15$
- B. $y = -15$
- C. $y = 3$
- D. $y = -3$

10. Simplify and evaluate the expression for $x = 9$.

$$6 - 5(3 - 5(2 - 3x))$$

- A. -634
- B. 616
- C. 141
- D. 50

11. Simplify and evaluate the expression for $a = -0.5$, $b = 2.5$.

$$2.5a - 3b(-4.1 + a(-3.3b - b) - b) + a$$

- A. -457.0125
- B. 7.4375
- C. -21.225
- D. 37.95

12. Simplify and evaluate the expression for $x = -1$, $y = 1/2$.

$$7y - 1(2 + 5x - 8(3 - 7x))$$

- A. $90 \frac{1}{2}$
- B. $86 \frac{1}{2}$
- C. 4.5
- D. $-207 \frac{1}{2}$

13. Find the missing number.

1, 6, 11, 16, ?, 26, 31

- A. 17
- B. 20
- C. 23
- D. 21

14. Find the missing number.

0.2, 0.4, ?, 0.8, 1.0

- A. 0.5
- B. 0.7
- C. 0.6
- D. 6.0

15. If these number patterns continue, which pattern will need the fewest additional numbers to reach or exceed 200?

- A. 9, 18, 27, 36, 45, ...
- B. 10, 20, 30, 40, 50, ...
- C. 5, 10, 20, 40, 80, ...
- D. 20, 40, 60, 80, 100, ...

16. For what value of y will the relation NOT be a function?

$\{(54, -3), (7y - \frac{y}{4}, 5)\}$

- A. $y = 1/3$
- B. $y = 8$
- C. $y = -2$
- D. $y = -3$

17. For what value of n will the relation NOT be a function?

$\{(\frac{8}{n}, 3), (\frac{16}{n} - 2, -3)\}$

- A. $n = -3$
- B. $n = 2$
- C. $n = 4$
- D. $n = 8$

18. On your own piece of paper, graph this relation: x equals y added to two. Then, choose the option that correctly answers the following question.

What are two possible coordinate points for the relation x equals y added to two?

- A. $\{(6, 2), (11, 3)\}$
- B. $\{(-2, -2), (18, 4)\}$
- C. $\{(3, -1), (6, -3)\}$
- D. $\{(3, 1), (5, 3)\}$

19. Solve the inequality.

$$\frac{n}{10} - 5 > 20$$

- A. $n > 25$
 - B. $n > 150$
 - C. $n > 205$
 - D. $n > 250$
20. Solve the inequality.

$$n - 3 < 5$$

- A. $n < 2$
- B. $n > 8$
- C. $n < 8$
- D. $n = 2$

21. What is the first step in solving the following compound inequality?

$$-12 \leq 6t - 18 \leq 36$$

- A. Divide each expression by 6.
- B. Flip the inequality signs.
- C. Add 18 to each expression.
- D. Isolate the variable.

22. Yesterday, Mikka went to the grocery store. She bought $\frac{1}{3}$ pound of peaches that cost 39¢ per pound. She also bought a loaf of bread for \$1.22 and a gallon of orange juice for \$3.76. The sales tax in Mikka's state is 6.5%. She gave the clerk at the store a \$10.00 bill and 18 pennies. How much money did Mikka spend at the grocery store?
- A. \$4.74
 - B. \$8.43
 - C. \$5.44
 - D. \$5.11
23. The training session held 50 people. On Monday 38 people attended. On Wednesday 46 people attended. On Thursday only $\frac{1}{2}$ as many as Wednesday's group attended. How many people attended this week?
- A. 107 people
 - B. 38 people
 - C. 157 people
 - D. 134 people
24. Three friends split $1\frac{1}{8}$ pounds of peanuts. The peanuts cost \$1.25 per pound. How many pounds will each person get?
- A. $\frac{1}{4}$ pound
 - B. $\frac{3}{8}$ pound
 - C. $\frac{1}{2}$ pound
 - D. $\frac{5}{8}$ pound
25. Find the missing symbol.
- $(8 \times 8) \underline{\quad} (7 \times 7) = 15$
- A. +
 - B. -
 - C. x
 - D. \div
26. Find the missing symbol.
- $(144 \div 10) \underline{\quad} 3.4 = 11$
- A. +
 - B. -
 - C. x
 - D. \div

27. 100 times n is 5.

What is the value of n?

- A. 5
- B. 0.05
- C. 0.5
- D. 2

28. Jason bought 3 times as many magazines as Cindy. Cindy bought 2 times as many as Peter. Alex bought 5 more than Peter. Alex bought 7 magazines. How many magazines did Cindy buy?

- A. 7 magazines
- B. 4 magazines
- C. 14 magazines
- D. 10 magazines

29. Use the table of zoo prices to answer the question.

One-day pass	
Adults	\$18.00
Children	\$11.50
Six-month pass	
Adults	\$300.00
Children	\$225.00

Mr. and Mrs. Gryswold bought six-month passes for themselves and their one child. They also bought two adult one-day passes for Aunt Edna and Uncle Vinnie. How much did the Gryswolds spend?

- A. \$843.00
- B. \$861.00
- C. \$83.50
- D. \$1425.00

30. Kari bought 3 dozen cookies and 2 gallons of milk for \$9.54. One gallon of milk costs \$2.43. How much did one cookie cost?

- A. \$0.59
- B. \$1.56
- C. \$0.13
- D. \$0.39

31. Which of the following best completes the number sentence?

$$8 \underline{\hspace{1cm}} = (8 \times 3) + (4 \times 8)$$

- A. $\times (3 \times 4)$
- B. $+ (3 \times 4)$
- C. $\times (3 + 4)$
- D. $+ (3 + 4)$

32. Which answer best completes the number sentence?

$$(-5 \times -8) + (-5 \times 7) = \underline{\hspace{1cm}}$$

- A. -5×1
- B. -5×-1
- C. -5×15
- D. -5×-15

33. Which answer best completes the following number sentence?

$$0.42 + 0.34 + -0.73 = \underline{\hspace{1cm}}$$

- A. -0.06
- B. -0.03
- C. 0.06
- D. 0.03

34. Find the equivalent form.

$$\sqrt{5} \times \sqrt{4}$$

- A. $\sqrt{20}$
- B. $\sqrt{9}$
- C. $\sqrt{1}$
- D. $\frac{\sqrt{5}}{\sqrt{4}}$

35. Find the equivalent form.

$$\sqrt{25} + \sqrt{16}$$

- A. 1
- B. $\sqrt{41}$
- C. 9
- D. $\sqrt{9}$

36. Solve for the value of x.

$$\sqrt{157} = x$$

- A. $x = 78.5$
- B. $12 < x < 13$
- C. $x = 13$
- D. $78 < x < 79$

37. Round to the nearest cent when necessary.

14 bagels cost \$4.98.

How much does one bagel cost?

- A. \$0.36
- B. \$0.42
- C. \$1.25
- D. \$0.12

38. Round to the nearest cent when necessary.

A half a dozen doughnuts cost \$3.49.

How much does one doughnut cost?

- A. \$0.29
- B. \$0.50
- C. \$1.75
- D. \$0.58

39. Round to the nearest cent when necessary.

Which of the following is the best price?

- A. 25 for \$36.10
- B. 30 for \$40.00
- C. 10 for \$23.95
- D. 50 for \$69.88

40. Round your answer to the nearest hundredth when necessary.

To get a certain shade of purple, Ginnie needs to mix red paint with blue paint in the ratio of 6:7.

How many quarts of red paint does Ginnie need to mix with 11 quarts blue paint?

- A. 12.83 quarts
- B. 462 quarts
- C. 9.43 quarts
- D. 0.08 quarts

41. If $\frac{28}{10} = \frac{14}{x}$, then x is ____?

- A. 140
- B. 5
- C. 10
- D. 28

42. To get a certain shade of orange, Raul needs to mix red paint with yellow paint in the ratio of 5:2.

Which of the following equations shows how many quarts of red paint Raul needs to mix with 4 quarts yellow paint?

- A. $5/2 = x/4$
- B. $5/2 = 4/x$
- C. $5/8 = x$
- D. $8/5 = x$

43. Mark weighs 60 more pounds than Dave. Dave weighs twice as much as Megan. Megan weighs 120 pounds. How much does Mark weigh?

- A. 300 pounds
- B. 180 pounds
- C. 120 pounds
- D. 240 pounds

44. Michele is 10 years older than Bob. Bob is twice as old as Janet. Janet is 39 years old. How old is Michele?

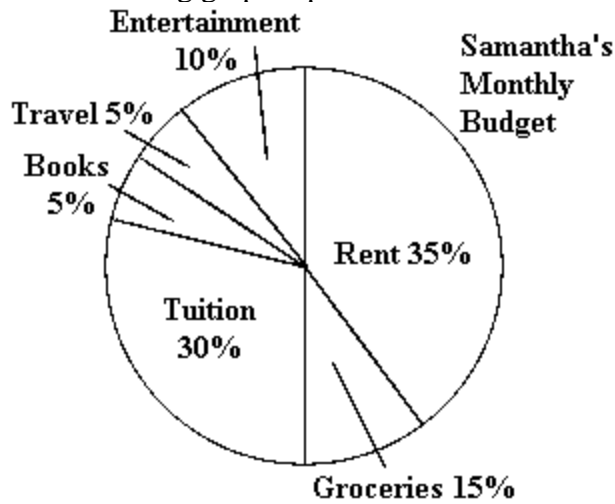
- A. 88 years old
- B. 68 years old
- C. 29 years old
- D. 9 years old

45. Antonio weighs more than 200 pounds. Last year, he weighed 155 pounds.

How much weight could he have gained?

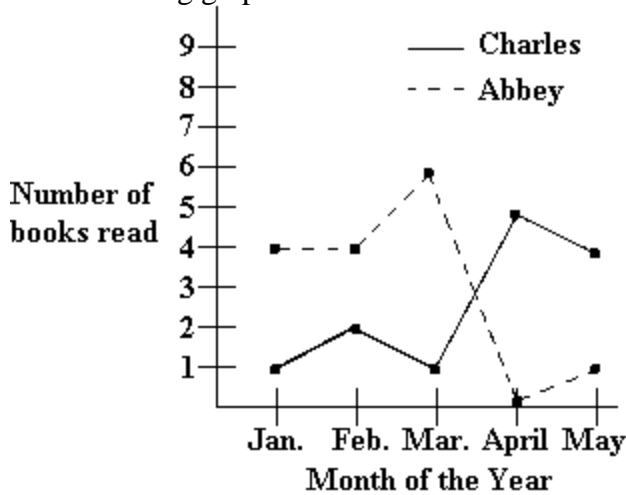
- A. $n = 45$ pounds
- B. $n > 45$ pounds
- C. $n < 45$ pounds

46. The following graph represents Samantha's monthly budget.



What percent does Samantha spend on books?

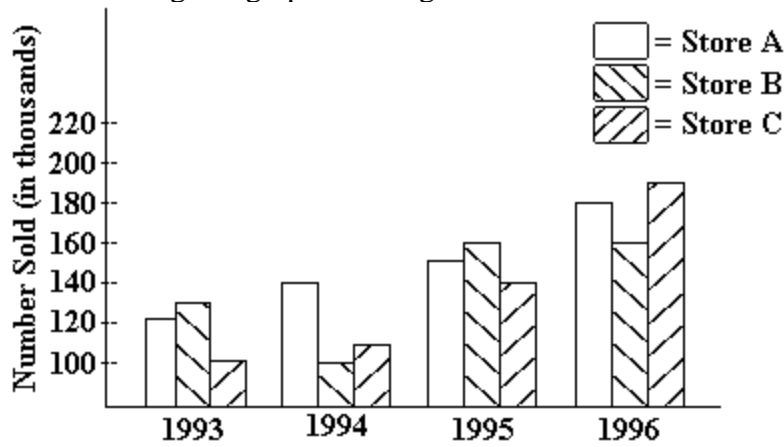
- A. 5%
 - B. 10%
 - C. 20%
 - D. 50%
47. The following graph shows the number of books that Charles and Abbey read each month.



Together, how many books did Charles and Abbey read?

- A. 15 books
- B. 18 books
- C. 25 books
- D. 28 books

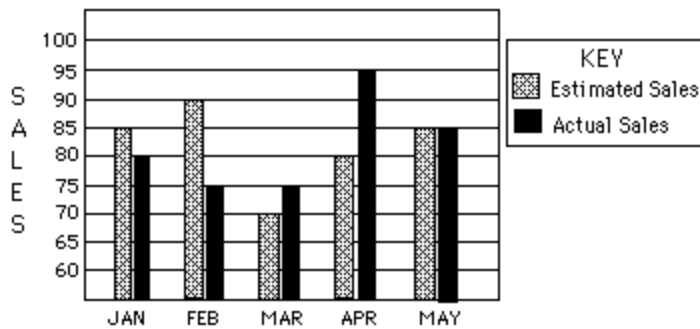
48. The following is a graph showing the sales from three cellular phone stores.



In which year were sales of cellular phones the greatest?

- A. 1993
- B. 1994
- C. 1995
- D. 1996

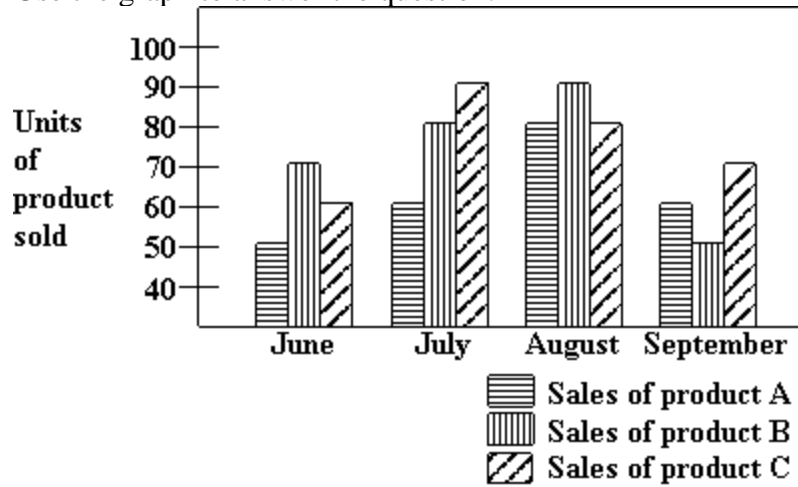
49. This graph represents a company's actual and estimated sales for January through May.



In February, how many more sales did the company estimate than there actually were?

- A. 90 sales
- B. 75 sales
- C. 15 sales
- D. 5 sales

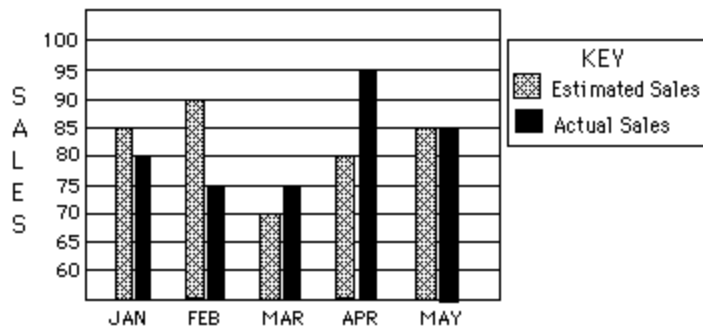
50. Use the graph to answer the question.



In which month did product B sell the most units?

- A. July
- B. June
- C. September
- D. August

51. This graph represents a company's actual and estimated sales for January through May.



How many actual sales were there in January?

- A. 90 actual sales
- B. 85 actual sales
- C. 80 actual sales
- D. 75 actual sales

- 52.** Mike conducted a poll to see how many people liked the food served in the cafeteria. In the poll, Mike found that 13 of the 125 people polled liked the food.

If there are 700 people in the school, how many people can Mike expect to like the food?

- A. 73 people
- B. 70 people
- C. 588 people
- D. 5.6 people

- 53.** The baseball stadium holds 62,000 people. Loni wanted to find out how many of these people recycled aluminum cans. She polled 475 people. Of the 475 people polled, 323 said that they did recycle aluminum cans.

If the stadium was sold out, how many of the people could be expected to recycle aluminum cans?

- A. 91,744 people
- B. 6,800 people
- C. 42,160 people
- D. 21,080 people

- 54.** A local radio station is having a contest to win a brand new car. They have put a check for \$10,000 in a car that is in a parking lot full of cars. To win the car, you need to have the key to the car. There are six sedans, five sports cars, eight sport utility vehicles, two luxury cars, and seven trucks. What is the probability that the check will be in a luxury car?

- A. $\frac{1}{14}$
- B. $\frac{3}{14}$
- C. $\frac{4}{14}$
- D. $\frac{13}{14}$

55. Use the table to answer the question. Round to the nearest cent when necessary.

	Pencils	Pens	Folders	Binders
STORE A	12 for \$1.10	12 for \$1.50	3 for \$0.90	\$1.59 each
STORE B	10 for \$0.90	10 for \$1.25	5 for \$1.15	2 for \$3.00
STORE C	6 for \$0.60	6 for \$0.90	\$0.25 each	3 for \$5.00
STORE D	20 for \$1.99	20 for \$2.99	10 for \$2.75	10 for \$9.99
STORE E	\$0.10 each	\$0.15 each	15 for \$3.75	5 for \$5.00
STORE F	5 for \$0.50	5 for \$0.75	2 for \$0.45	6 for \$6.25

Which store is the most expensive for one folder?

- A. store D
 - B. store A
 - C. store E
 - D. store C
56. Use the table to answer the question. Round to the nearest cent when necessary.

	Pencils	Pens	Folders	Binders
STORE A	12 for \$1.10	12 for \$1.50	3 for \$0.90	\$1.59 each
STORE B	10 for \$0.90	10 for \$1.25	5 for \$1.15	2 for \$3.00
STORE C	6 for \$0.60	6 for \$0.90	\$0.25 each	3 for \$5.00
STORE D	20 for \$1.99	20 for \$2.99	10 for \$2.75	10 for \$9.99
STORE E	\$0.10 each	\$0.15 each	15 for \$3.75	5 for \$5.00
STORE F	5 for \$0.50	5 for \$0.75	2 for \$0.45	6 for \$6.25

How much more is one folder at Store E than at Store C?

- A. \$0.25
- B. \$0.01
- C. \$0.02
- D. The item is the same price at both stores.

57. Use the table to answer the question. Round to the nearest cent when necessary.

	Pencils	Pens	Folders	Binders
STORE A	12 for \$1.10	12 for \$1.50	3 for \$0.90	\$1.59 each
STORE B	10 for \$0.90	10 for \$1.25	5 for \$1.15	2 for \$3.00
STORE C	6 for \$0.60	6 for \$0.90	\$0.25 each	3 for \$5.00
STORE D	20 for \$1.99	20 for \$2.99	10 for \$2.75	10 for \$9.99
STORE E	\$0.10 each	\$0.15 each	15 for \$3.75	5 for \$5.00
STORE F	5 for \$0.50	5 for \$0.75	2 for \$0.45	6 for \$6.25

Denny bought 3 pencils, 1 pen and 2 folders at Store E. How much did he spend?

- A. \$1.00
- B. \$0.90
- C. \$1.05
- D. \$0.95

58. Find the value of the $?$ in the given statement.

$$0.005 = 5 \times 10^?$$

- A. 4
- B. 2
- C. -2
- D. -3

59. Find the value of the $?$ in the given statement.

$$2.305 \times 10^? = ?$$

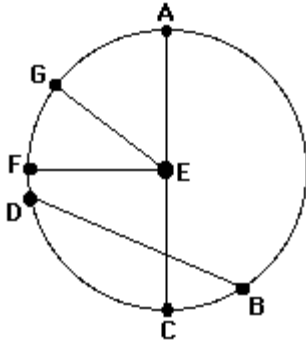
- A. 2,305
- B. 230.5
- C. 23.05
- D. 235

60. Find the value of the $\underline{?}$ in the given statement.

$$3.24 \times 10^4 = ?$$

- A. 3,240,000
- B. 324,000
- C. 3,240
- D. 32,400

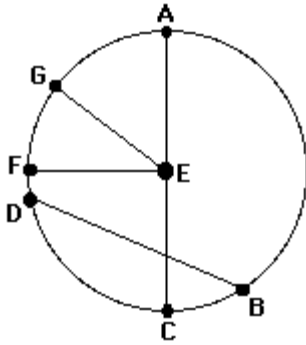
61. Use the figure to answer the question.



Which of the following names a chord?

- A. line segment EF
- B. line segment FA
- C. line segment AC
- D. line segment CE

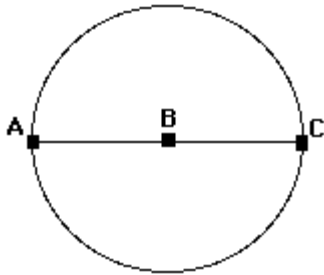
62. Use the figure to answer the question.



Which of the following names a diameter?

- A. line segment DB
- B. line segment EF
- C. line segment CE
- D. line segment AC

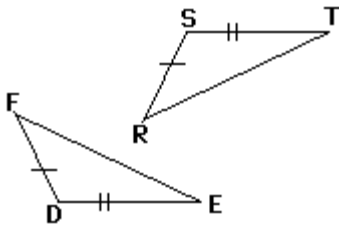
63. Fill in the blank.



Point B is the center of the circle. Chord AC is _____.

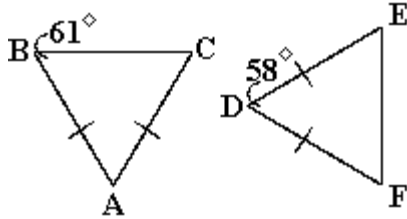
- A. a central angle
- B. a diameter
- C. an arc
- D. a radius

64. These two triangles are congruent.



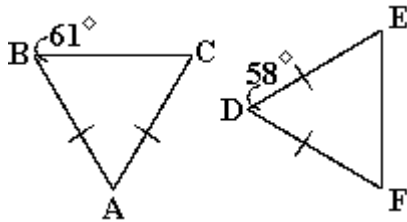
$\angle FDE$ is equal to 110° . $\angle DEF$ is equal to 39° . What is $\angle RST$ equal to?

- A. 110°
 B. 31°
 C. 70°
 D. 39°
65. These two triangles are congruent.



If Side AC is equal to 18 inches, then Side DF is equal to _____.

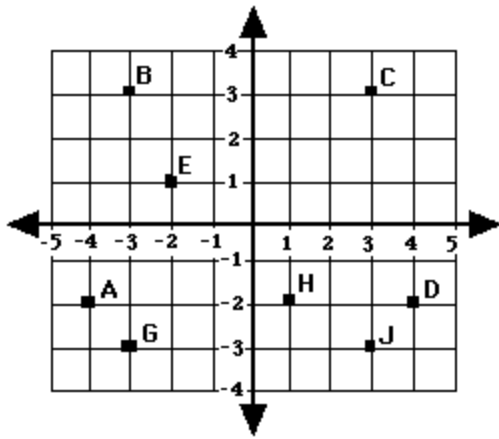
- A. 5 inches
 B. 18 inches
 C. 23 inches
 D. 19 inches
66. These two triangles are congruent.



What is the measure of $\angle DFE$?

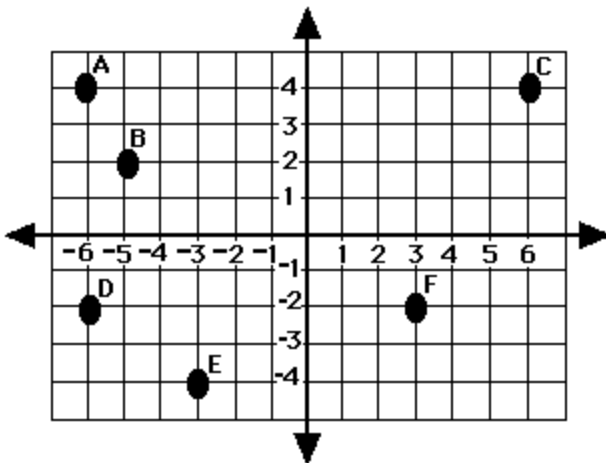
- A. 119°
 B. 58°
 C. 61°
 D. 122°

67. What point has the coordinates (4, -2)?



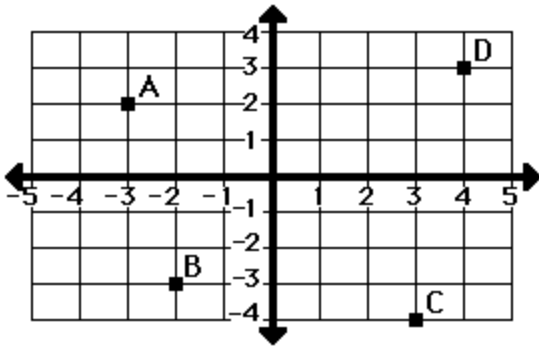
- A. A
- B. D
- C. E
- D. H

68. Which point is named by the coordinates (-3, -4)?



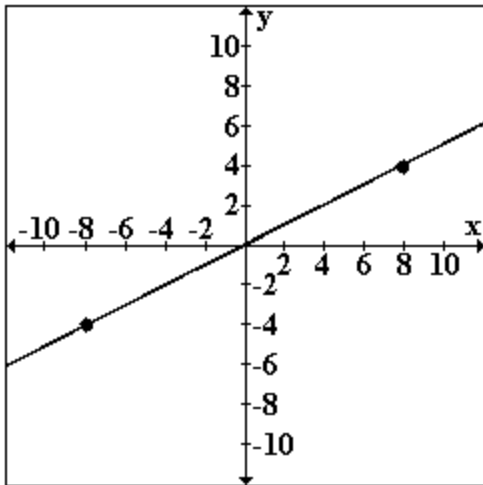
- A. point F
- B. point D
- C. point B
- D. point E

69. What letter is at point $(-2, -3)$?



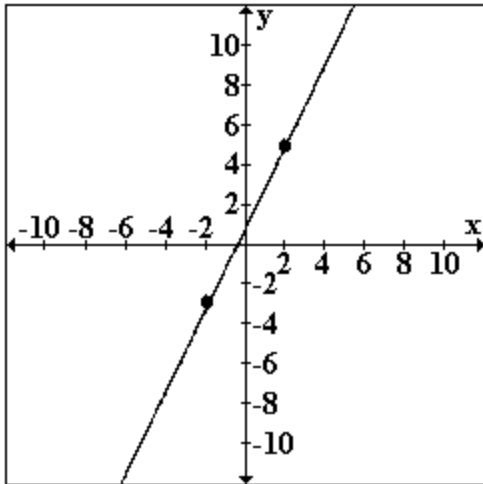
- A. A
B. B
C. C
D. D
70. A rectangular prism has 8 vertices.
How many edges does it have?
A. 6 edges
B. 12 edges
C. 16 edges
D. 64 edges
71. A square pyramid has 5 faces.
How many vertices does it have?
A. 4 vertices
B. 10 vertices
C. 8 vertices
D. 5 vertices
72. A cube has 6 sides.
How many vertices does it have?
A. 4 vertices
B. 6 vertices
C. 8 vertices
D. 16 vertices

73. Which equation best represents the graph?



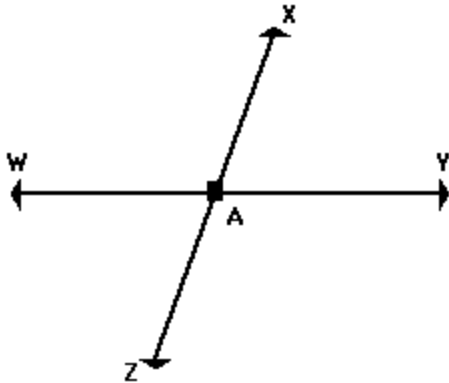
- A. $y = 1/2 x$
B. $x = 1/2 y - 1$
C. $x = 1/2 x - 1$
D. $y = 2x$
74. If $x = 0$ and $y = 2x$, how many solutions to the equation are possible?
- A. 0
B. 2
C. 1
D. An infinite number.

75. Which equation best represents the graph?



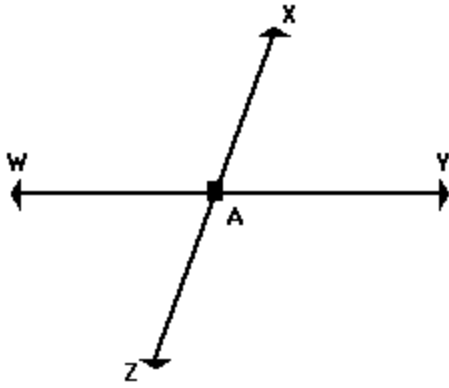
- A. $x = 2y + 1$
- B. $x = 2y - 1$
- C. $y = 2x + 1$
- D. $y = -2x + 1$

76. What is the point of intersection?



- A. Z
- B. W
- C. A
- D. Y

77. Which of the following is a line?



- A. line WZ
- B. line WY
- C. line ZY
- D. line XY

78. Fill in the blank.

A line has _____.

- A. two endpoints
- B. one endpoint
- C. more than three endpoints
- D. no endpoints

79. Holly, Pedro, Oliver, Chris, and Tammy drew different geometric figures: a circle, a pentagon, a trapezoid, a hexagon, and an octagon. No person's name begins with the same first letter as that person's drawing. Chris, Pedro, and Tammy drew figures with more than 4 sides. Chris' drawing has the most sides. Oliver's drawing has exactly one pair of parallel lines.

Which person drew the trapezoid

- A. Pedro
- B. Tammy
- C. Chris
- D. Oliver

- 80.** Holly, Pedro, Oliver, Chris, and Tammy drew different geometric figures: a circle, a pentagon, a trapezoid, a hexagon, and an octagon. No person's name begins with the same first letter as that person's drawing. Chris, Pedro, and Tammy drew figures with more than 4 sides. Chris' drawing has the most sides. Oliver's drawing has exactly one pair of parallel lines.

Which person drew the circle?

- A. Pedro
- B. Tammy
- C. Holly
- D. Oliver

- 81.** The Morell family wants to buy a new stereo system. The stereo costs \$350 dollars. They are trying to decide the best method for buying the stereo.

METHOD 1: Use the store's payment plan. The Morell family will pay the store \$23.00 a month for 18 months.

METHOD 2: Withdraw the \$350 in cash from their savings account. The Morell family would then put \$15 into the savings account every two weeks.

METHOD 3: Use a credit card and pay the minimum amount of \$20 each month. A finance charge of 16.5% will be added each month for the amount not yet paid.

If the Morell family chooses METHOD 1, how much will the family actually pay for the stereo?
(HINT: Round answer to the nearest whole number.)

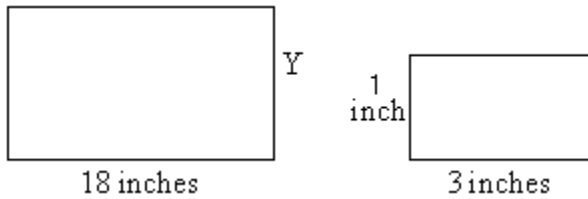
- A. \$386.00
- B. \$396.00
- C. \$64.00
- D. \$414.00

- 82.** Fill in the blank.

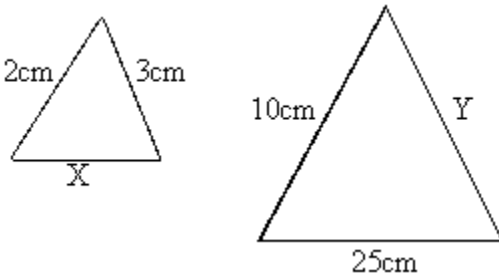
Similar figures have _____.

- A. different sizes and shapes
- B. the same size, but a different shape
- C. the same size and shape
- D. different sizes, but the same shape

83. These two rectangles are similar. What is the value of Y?



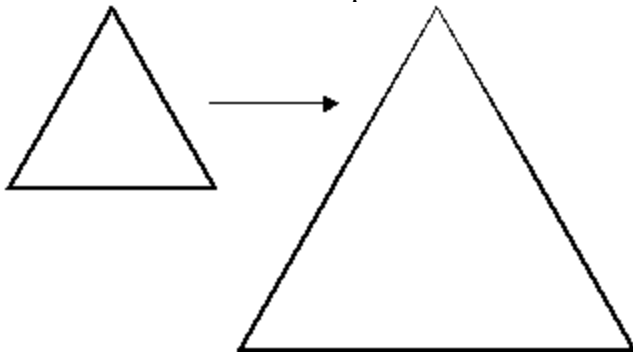
- A. 2 inches
B. 18 inches
C. 6 inches
D. 51 inches
84. The following triangles are similar. What is the value of X?



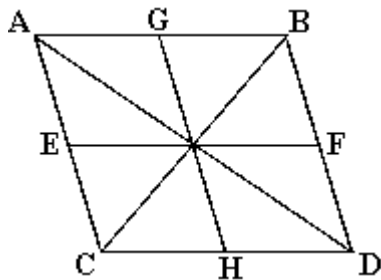
- A. 0.8 cm
B. 5 cm
C. 125 cm
D. 1.25 cm
85. Which transformation was performed on the following figure?
R → **Я**

- A. Rotation
B. Reflection
C. Translation
D. Dilation
86. Choose the coordinates of the point that is the reflection over the x-axis of the point Q (6, 3).
- A. (-6, 3)
B. (-6, -3)
C. (6, -3)
D. (6, 3)

87. Which transformation was performed on the following figure?

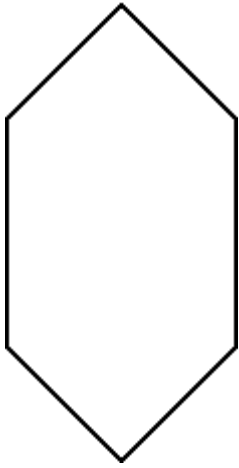


- A. Rotation
 - B. Reflection
 - C. Translation
 - D. Dilation
88. Choose the option that lists all of the lines of symmetry that are shown for the following figure.



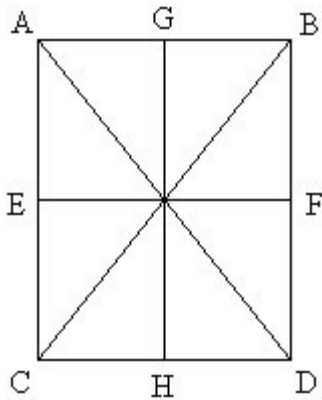
- A. AD, BC
- B. EF, GH
- C. AD, BC, EF, GH
- D. There are no lines of symmetry.

89. How many lines of symmetry are there in the following figure?



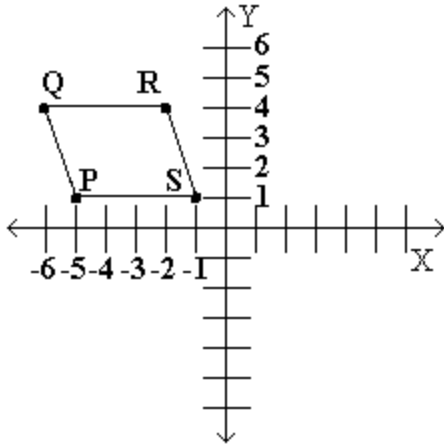
- A. 1
- B. 2
- C. 3
- D. 4

90. Choose the option that lists all of the lines of symmetry that are shown for the following figure.

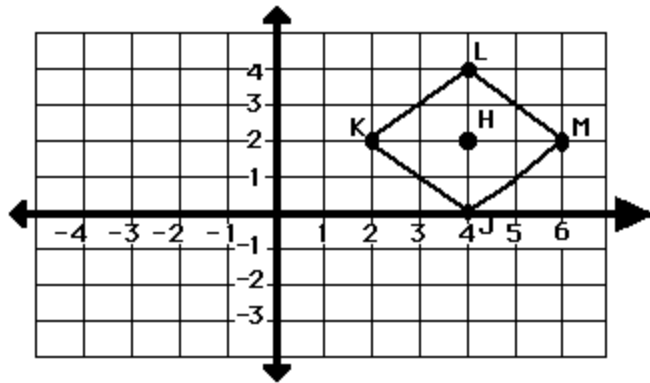


- A. EF, GH
- B. BC, EF, GH
- C. AD, BC, GH
- D. AD, BC, EF, GH

91. If point Q was reflected about the y-axis, what would be its new coordinates?

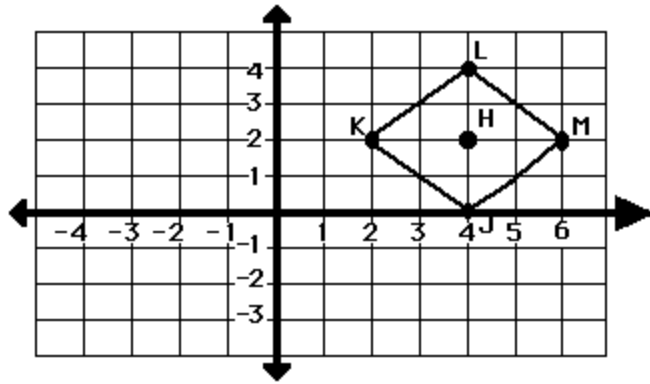


- A. (6, 4)
B. (-6, 4)
C. (6, -4)
D. (-6, -4)
92. What will the coordinates of point L be if figure LMJK is rotated around point H so that point J is at (4, 4)?



- A. (4, 0)
B. (2, 2)
C. (6, 2)
D. (4, 4)

93. The x-axis is the line of symmetry for figure JKLM. What is the reflection point of point K?



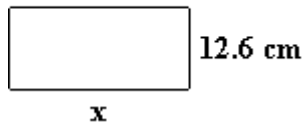
- A. (2, -2)
B. (-2, -2)
C. (2, 2)
D. (-2, 2)
94. Choose the best estimate for the length of a dog.
- A. 2.5 cm
B. 2.5 km
C. 2.5 in
D. 2.5 ft
95. Choose the measurement that is the most precise.
- A. 152 mm
B. 15 cm
C. 1.5 m
D. They are all of equal precision.
96. Choose the best estimate for the thickness of a textbook.
- A. 1.5 in
B. 1.5 mm
C. 1.5 km
D. 1.5 ft

97. What is the area of a rectangle that is 11.24 centimeters long and 61.8 centimeters wide?

- A. 347.316 square centimeters
- B. 73.04 square centimeters
- C. 694.632 square centimeters
- D. 146.08 square centimeters

98. What is the value of x ?

$$\text{Area} = 312.48 \text{ cm}^2$$

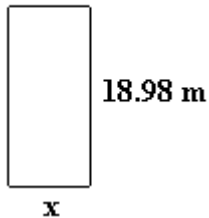


Round the answer to the nearest tenth.

- A. 287.3 cm
- B. 49.6 cm
- C. 12.4 cm
- D. 24.8 cm

99. What is the value of x ?

$$\text{Area} = 75.5404 \text{ m}^2$$



Round the answer to the nearest hundredth.

- A. 3.98 m
- B. 56.56 m
- C. 18.79 m
- D. 8.00 m

100. What is the circumference of a circle with a diameter equal to 4 centimeters?

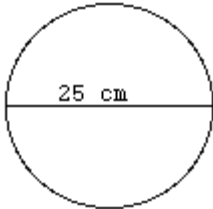
- A. 16 cm
- B. 1.27 cm
- C. 0.785 cm
- D. 12.56 cm

101. The circumference of a circle is 28.26 meters.

What is the diameter of the circle?

- A. 3.14 m
- B. 0.11 m
- C. 88.74 m
- D. 9 m

102. What is the circumference of the circle?



- A. 490.63 cm
- B. 157 cm
- C. 39.25 cm
- D. 78.5 cm

103. Which of the following is the best estimate for how much a needle weighs?

- A. gram
- B. milligram
- C. kilogram
- D. dekagram

104. Which of the following is the best estimate for how much an orange weighs?

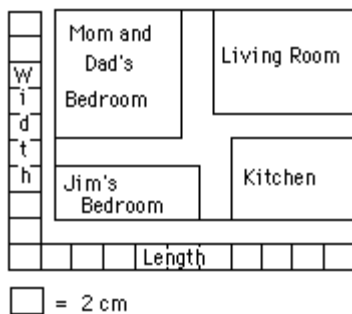
- A. 75 kg
- B. 75 g
- C. 75 mg
- D. 75 tons

105. Which of the following is the best estimate for how much a car weighs?

- A. 2 kg
- B. 2 tons
- C. 2 dag
- D. 2 hg

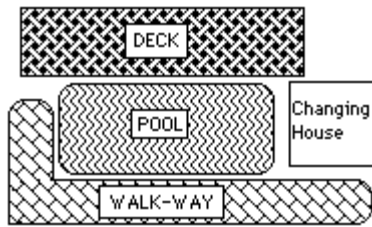
106. What is the perimeter of a rectangle with a width equal to 45 feet and a length twice as long as the width?
- A. 270 feet
 - B. 180 feet
 - C. 135 feet
 - D. 2025 feet
107. Sunjung and Dave built a square sandbox for the neighborhood kids. One side of the sandbox is 15 feet long.
- What is the perimeter of the sandbox?
- A. 60 feet
 - B. 225 feet
 - C. 120 feet
 - D. 45 feet
108. What is the perimeter of a triangle with each side equal to 84 inches?
- A. 336 inches
 - B. 126 inches
 - C. 252 inches
 - D. 168 inches

109. Jim drew this scale drawing of his house.



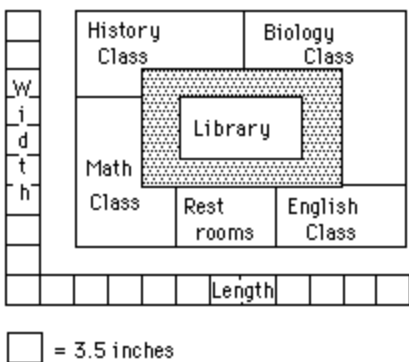
- Jim used the scale 2 centimeters equals 4 meters. What is the actual width of Jim's bedroom?
- A. 40 meters
 - B. 4 meters
 - C. 8 meters
 - D. 16 meters

110. This is the layout of the McDougal's backyard. The scale is 1 centimeter to 5 meters. The deck is 0.45 centimeters from the pool on the layout.



What is the actual distance between the deck and the pool?

- A. 0.9 meters
 - B. 19.8 meters
 - C. 2.25 meters
 - D. 1.13 meters
111. This is a scale drawing of Lincoln Junior High School.



The scale used is 3.5 inches equals 7 feet. What is the actual width of the restrooms?

- A. 49 feet
- B. 24.5 feet
- C. 21 feet
- D. 14 feet

112. What is the total weight of the items in the table?

Item	Weight
small bird	45 g
brick	9.2 kg
textbook	22.5 dag
puppy	6 hg

- A. 42.2 kg
- B. 10.07 kg
- C. 6.7652 kg
- D. 9.53 kg

113.
$$\begin{array}{r} 5 \text{ yd} \quad 2 \text{ ft} \quad 9 \text{ in} \\ + \quad \quad 1 \text{ ft} \quad 7 \text{ in} \\ \hline \end{array}$$

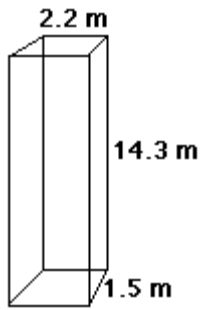
- A. 6 yd 1 ft 6 in
- B. 6 yd 1 ft 4 in
- C. 6.16 yd
- D. 5 yd 1 ft 2 in

114. What is the total length of the objects listed in the table?

ITEM	LENGTH
History Book	28 cm
Pencil	150 mm
Jump Rope	2 m
Phone Book	270 mm

- A. 2 meters 42 centimeters 2 millimeters
- B. 3 meters
- C. 2 meters 70 centimeters
- D. 2 meters 32 centimeters

115. Find the volume of the block.



- A. 47.19 cubic meters
B. 18 cubic meters
C. 32.96 cubic meters
D. 94.38 cubic meters
116. What is the volume of a block that is 1.8 meters long, 2.3 meters wide, and 0.9 meters high?
- A. 5 cubic meters
B. 3.69 cubic meters
C. 3.726 cubic meters
D. 5.041 cubic meters
117. What is the volume of a block that is 4 centimeters long, 10 centimeters wide and 3.4 centimeters high?
- A. 108 cubic centimeters
B. 136 cubic centimeters
C. 17.4 cubic centimeters
D. 43.3 cubic centimeters
118. Which of the following numbers is greater than the others?
- A. $\frac{1}{2}$
B. 100%
C. $\frac{3}{4}$
D. 0.9

119. Which of the following could be the value of y ?

$$\frac{y}{100} = 81\%$$

- A. 8.1
- B. 81
- C. 9
- D. 19

120. Which of the following statements is true?

- A. $9/8 < 1 \frac{1}{8}$
- B. $2/3 = 2.3$
- C. $5/3 > 1 \frac{1}{3}$
- D. $9.56 < 9.5$

121. What is the value of X ?

$$87.5\% = 0.875 = X$$

- A. $875/100$
- B. $7/8$
- C. $8 \frac{3}{4}$
- D. $1 \frac{37}{100}$

122. Which of the following is another way to write 70%?

- A. $7/100$
- B. $7/10$
- C. 0.07
- D. 7.0

123. Which of the following is another way to write 1%?

- A. $10/10$
- B. 0.01
- C. 0.1
- D. 1

- 124.** Beverly wants to borrow \$7,000 to buy a used car. She wants to borrow the money for 3 years at a simple interest rate of 9% per year.

How much interest will Beverly pay over the three years?

- A. \$630
- B. \$1,890
- C. \$2,100
- D. \$2,333

- 125.** Butch wants to borrow \$3,600 to buy a ski-mobile. He wants to borrow the money for 18 months at an interest rate of 7.25% per year.

How much interest will Butch pay over the eighteen months?

- A. \$1,098.00
- B. \$4,698.00
- C. \$3,208.50
- D. \$391.50

- 126.** The Camping Store is having a sale. The discount is 15% on all items.

If the original price of a tent is \$79.75, what is the sale price?

- A. \$5.32
- B. \$91.71
- C. \$11.96
- D. \$67.79

- 127.** Three friends were talking about the meaning of an isosceles triangle. Cheryl said, "It is a figure with 3 equal sides". Terry said, "It is a figure with 3 sides, two of which are equal". Tom said, "It is a figure with 3 sides". Whose description is the MOST accurate?

- A. Cheryl
- B. Terry
- C. Tom
- D. None of the 3 friends were correct.

128. Which word best describes the following numbers?

$$\frac{2}{9}, \frac{7}{4}, 2.14, 7.99$$

- A. Integers
- B. Real numbers
- C. Irrational numbers
- D. Whole numbers

129. Amaya is the entertainment writer for the school paper. She is allowed to use 2 pages for her articles. There are 30 lines of type on each page. The sports section is 3 pages long. The average line contains 15 words. How many words are there in Amaya's entertainment section?

- A. 120 words
- B. 900 words
- C. 1350 words
- D. 150 words

130. Find the common factors of 18 and 24.

- A. 4, 8, 9, 12, 18, 24
- B. 3, 4, 6, 8
- C. 1, 2, 3, 6
- D. 1, 18, 24

131. Find the least common multiple of 16 and 4.

- A. 16
- B. 8
- C. 4
- D. 2

132. Find the greatest common factor for 24 and 32.

- A. 1
- B. 4
- C. 16
- D. 8

133. Identify the following number as either prime or composite.

39

- A. prime
- B. composite

134. Which of the following equations has prime factors?

- A. $42 = 2 \times 3 \times 7$
- B. $18 = 9 \times 2$
- C. $40 = 2 \times 4 \times 5$
- D. $28 = 4 \times 7$

135. Which of the following equations has prime factors?

- A. $16 = 4 \times 4$
- B. $100 = 5 \times 2 \times 5 \times 2$
- C. $500 = 5 \times 10 \times 10$
- D. $12 = 3 \times 4$

136. Show how to read this number: 101,600,006,402

- A. 101 million, 600 thousand, 642
- B. 101 billion, 600 million, 6 thousand, 402
- C. 101 million, 600 thousand, 6 hundred, 402
- D. 101 billion, 600 million, 6 thousand, 402 hundred

137. Show how to read this number: 54,622,000,800

- A. 54 million, 622 thousand, 800
- B. 54 billion, 622 million, 800
- C. 54 billion, 622 million, 800 thousand
- D. 54 billion, 622 thousand, eight

138. Show how to read this number: 482,376,043,112.

- A. 482 billion, 376 million, 43 thousand, 112
- B. 482 hundred billion, 376 hundred million, 43 thousand, 112
- C. 482 million, 376 hundred thousand, 43 thousand, 112
- D. 482 hundred thousand, 376 ten thousand, 43 thousand, 112