

Student Name _____

Mississippi Curriculum Test,
Second Edition

MCT2

GRADE

5

PRACTICE
TEST BOOK

MISSISSIPPI



MATHEMATICS

Mathematics

Mark your answers for questions 1–60 on your answer document. Mark only one answer for each question. You may write in your test booklet, but you must mark your answers on your answer document.

1. Toni cut boards to make a birdhouse. The table below shows the length of the boards.

Birdhouse Boards

Length of Board (inches)	$33\frac{3}{4}$	$35\frac{5}{8}$	$35\frac{1}{4}$

Which inequality correctly compares the board lengths from longest to shortest?

- A. $33\frac{1}{4} > 35\frac{1}{4} > 35\frac{5}{8}$
 B. $33\frac{3}{4} > 35\frac{5}{8} > 35\frac{1}{4}$
 C. $35\frac{5}{8} > 33\frac{3}{4} > 35\frac{1}{4}$
 D. $35\frac{5}{8} > 35\frac{1}{4} > 33\frac{3}{4}$

2. What number is equivalent to the following expression?

$$9,000,000 + 40,000 + 9000 + 200 + 80$$

- F. 94,928
 G. 949,208
 H. 9,049,280
 J. 9,409,280

3. Kendra bought trays of flowers to plant in her front yard. Each tray contained 6 flowers.

Which could be the total number of flowers she bought?

- A. 63
 B. 160
 C. 266
 D. 312

4. Geoff planned to list all the prime numbers between 70 and 100. His list is shown below.

71, 73, 79, 83, 93, 97

His friend noticed that one prime number is missing.

What prime number is missing from Geoff's list?

- F. 81
- G. 87
- H. 89
- J. 91

5. What value of x makes the equation below true?

$$211 = x - 79$$

- A. 290
- B. 280
- C. 242
- D. 132

6. The table below shows the relationship between the number of students in an art class and the total number of buttons the teacher and students will need to complete an art project.

Buttons For Art

Number of Students	Number of Buttons
13	75
15	85
18	100
20	110

Which rule was used to complete the table?

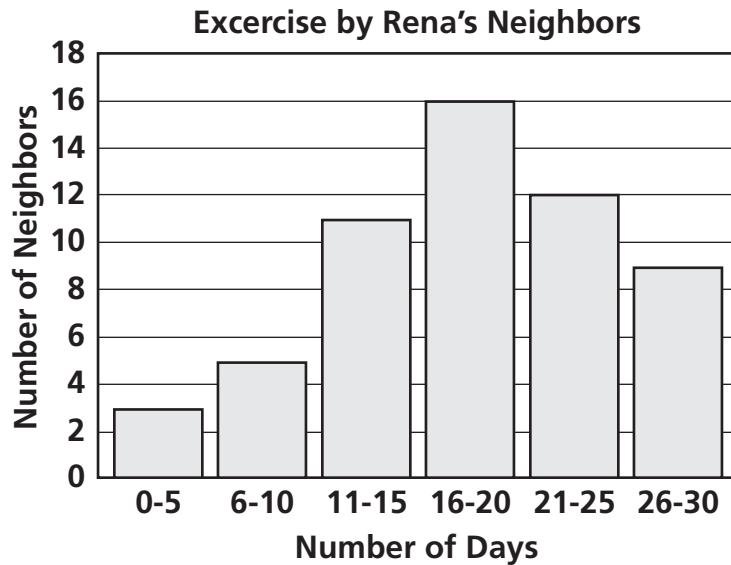
- F. $(n \times 6) - 3$
- G. $(n \times 4) + 23$
- H. $(n \times 5) + 10$
- J. $(n + 5) \times 10$

7. Which number could be placed in the box to make the equation true?

$$579,623 \times \square = 579,623$$

- A. 0
- B. 1
- C. 2
- D. 10

8. Rena surveyed her neighbors about the number of days they exercised last month. She graphed the results below.



Which question can be answered from the data in Rena's graph?

- F. Did Rena's neighbors exercise for less than 1 hour per day?
- G. Which were the best weeks in the month to exercise?
- H. Are neighbors who exercised the greatest number of days healthier than other neighbors?
- J. How many neighbors exercised from 0 to 20 days last month?

9. The ages of the children who visited an art exhibition one day are recorded in the table below.

Visitors to Art Exhibition

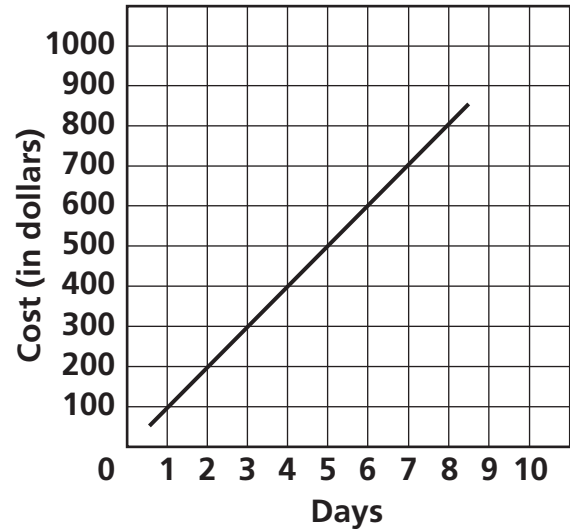
Age (years)	Number of Children
8	5
9	9
10	4
11	10
12	7

What is the range of the number of children of different ages?

- A. 4
- B. 6
- C. 7
- D. 11

10. The graph below shows the cost of staying at the Best Motel for different numbers of days.

Costs for Best Motel



If the cost per day does not change, which is closest to the cost to stay at the motel for 10 days?

- F. \$100
- G. \$500
- H. \$800
- J. \$1000

11. Which shape has the most lines of symmetry?

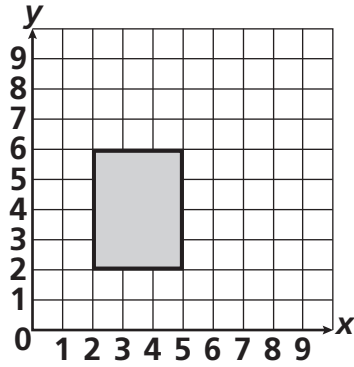
- A. Circle
- B. Square
- C. Triangle
- D. Rectangle

12. The points below locate the vertices of a quadrilateral Camille drew on a coordinate grid.

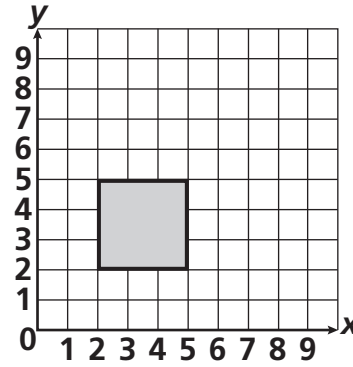
$(2, 2)$, $(2, 6)$, $(5, 6)$, $(5, 2)$

Which grid below best shows the vertices of the quadrilateral Camille drew?

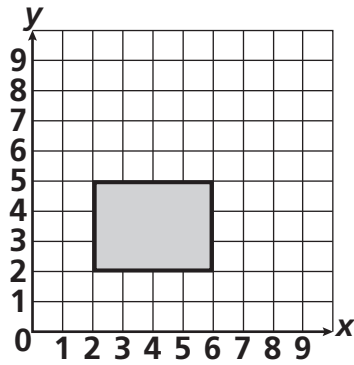
F.



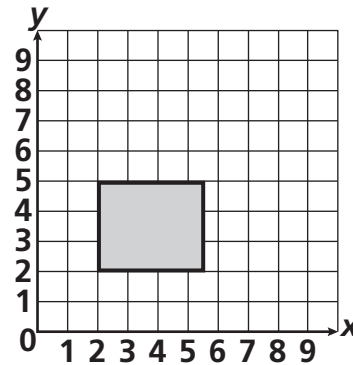
H.



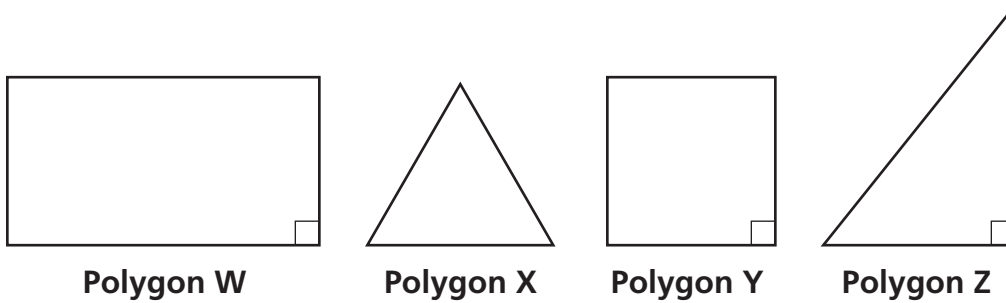
G.



J.



13. Riko's teacher asked her to arrange the following polygons from the one with the fewest lines of symmetry to the one with the most lines of symmetry.



What is the correct order for the polygons?

- A. X, W, Z, Y
 - B. Y, X, W, Z
 - C. Z, W, X, Y
 - D. Z, Y, X, W
-
14. A picture of a marker is shown below.

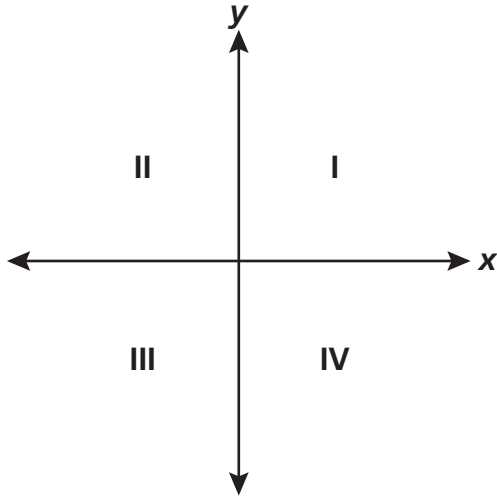


Use the ruler provided for you to measure the line segment under the marker.

Which of the following is closest to the length of the marker?

- F. 12.0 centimeters
- G. 12.0 decimeters
- H. 1.2 centimeters
- J. 1.2 millimeters

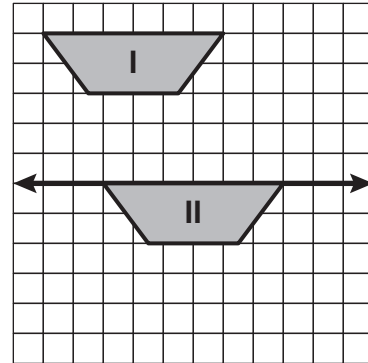
15. Let (x, y) represent an ordered pair on the following coordinate plane.



In which quadrants are x and y either both negative numbers or both positive numbers?

- A. I and II
- B. I and III
- C. I and IV
- D. II and III

16. The figure on the grid below was translated from position I to position II.



Which best describes how the figure was translated from position I to position II?

- F. Right 2 units and down 5 units
- G. Right 2 units and down 4 units
- H. Down 3 units and right 2 units
- J. Down 5 units and right 1 unit

17. The height of the Statue of Liberty from her sandals to the top of her torch is about 150 feet.



What is 150 feet written in yards?

- A. 15 yards
- B. 30 yards
- C. 50 yards
- D. 75 yards

18. Kayla graphed the coordinate pairs given in the table on a grid.

x	y
0	5
1	7
2	9
3	11
4	13

For each coordinate pair above, which rule could be used to generate the y value from the x value?

- F. Add 2 to the value of x
- G. Add 5 to the value of x
- H. Multiply the value of x by 2, then add 5
- J. Multiply the value of x by 3, then add 2

19. Shantel's teacher brought four watermelons for the 5th grade class picnic and asked the class to determine the combined weight of the four watermelons.

Which of the following is an appropriate measurement of the combined weight of the four watermelons?

- A. 80 pounds
- B. 80 ounces
- C. 80 tons
- D. 80 gallons

21. Edward and Jill each wrote a number. Edward's number was greater than Jill's number.

Which inequality correctly compares the numbers Edward and Jill could have written?

- A. $54,397,418.004 > 54,397,490.114$
- B. $54,380,419.004 > 54,380,418.114$
- C. $54,244,409.114 > 54,244,418.004$
- D. $54,100,418.114 > 54,100,420.004$

20. Compare the area of the following two figures.

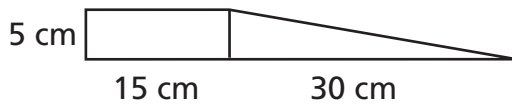


Figure 1

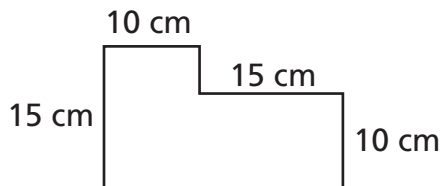


Figure 2

Which of the following statements is true?

- F. The area of figure 2 is three times the area of figure 1.
- G. The area of figure 2 is two times the area of figure 1.
- H. The area of figure 2 is half the size of the area of figure 1.
- J. The area of the two figures are equal.

22. The population of Mississippi in 2004 was estimated to be two million, nine hundred two thousand, nine hundred sixty-six.

What is this number written in standard form?

- F. 292,966
- G. 2,902,966
- H. 2,920,966
- J. 2,902,900,066

23. Devin plans to display his entire collection of 128 arrowheads. He wants to display an equal number of arrowheads in each of several different cases.

Which could NOT be the number of arrowheads Devin could display in each case?

- A. 8
- B. 12
- C. 16
- D. 32

25. Which of the following regular polygons has 5 lines of symmetry?

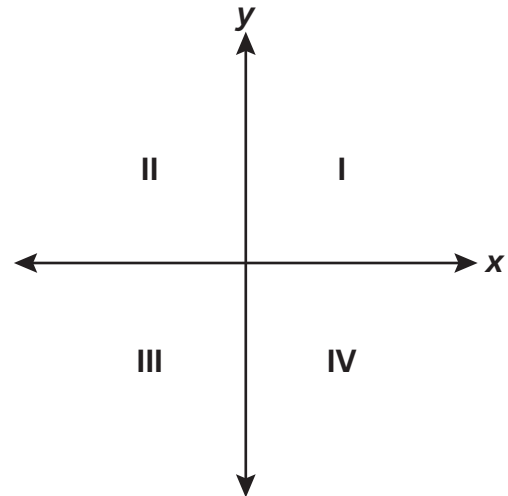
- A. Triangle
- B. Pentagon
- C. Rhombus
- D. Octagon

24. Brittany exercised for a total of $1\frac{2}{8}$ hours. Macie exercised for $\frac{3}{8}$ hour. Cecily exercised for $\frac{5}{4}$ hours.

Which of the following statements is true?

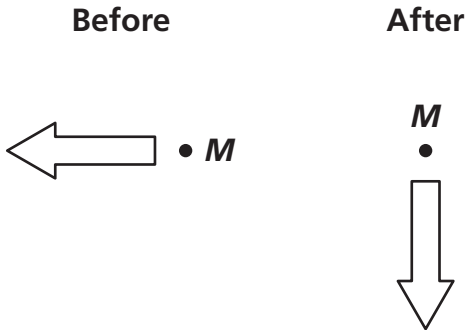
- F. Macie exercised longer than Cecily.
- G. Cecily exercised longer than Brittany.
- H. Macie and Brittany exercised the same length of time.
- J. Brittany and Cecily exercised the same length of time.

26. Which ordered pair would be plotted in Quadrant II?



- F. $(-5, -3)$
- G. $(-3, 5)$
- H. $(3, 5)$
- J. $(5, -3)$

27. The position of an arrow and Point M is shown in the before-and-after drawing below.



Which statement best describes how the position of the arrow was changed from before to after?

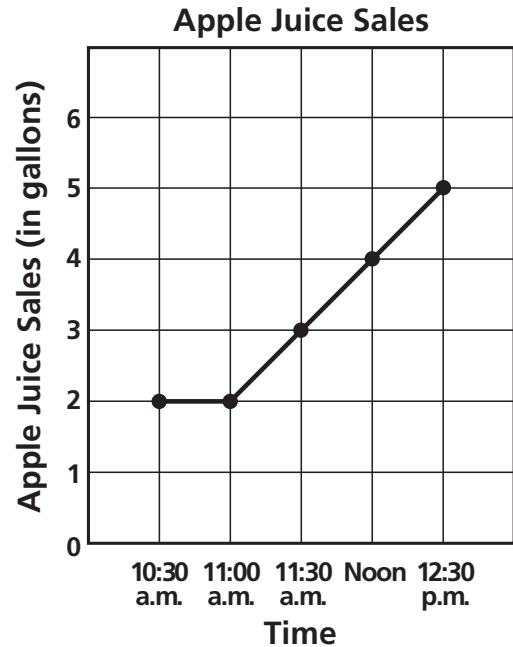
- The arrow was rotated 90° clockwise around Point M .
- The arrow was rotated 180° clockwise around Point M .
- The arrow was rotated 90° counterclockwise around Point M .
- The arrow was rotated 270° counterclockwise around Point M .

28. What value of x makes the equation true?

$$3x + 2 = 14$$

- 3
- 4
- 13
- 15

29. Sandra recorded the sale of apple juice at her store from 10:30 a.m. to 12:30 p.m. The results are graphed below.



Which of the following questions can be answered with the data from the graph?

- Which other drink is asked for most often?
- Does the sale of apple juice increase on a hot day?
- How many gallons were sold between 11:00 a.m. and 11:30 a.m.?
- How many customers bought apple juice between noon and 12:30 p.m.?

30. Kim played five games at the county fair. She threw darts to try to burst balloons. The results of her games are shown in the table below.

Balloon Bursting Game

Game Number	Number of Balloons Burst
1	4
2	4
3	5
4	5
5	3

What is the median of the balloon bursting data in the table?

- F. 2
- G. 3
- H. 4
- J. 5

31. What is 9,000,000 written in word form?

- A. Nine billion
- B. Nine million
- C. Nine thousand
- D. Nine hundred thousand

32. The table below shows the times eight swimmers took to finish a 50-meter swim.

50-Meter Swim

Swimmer	Time (seconds)
Gary	21.93
Stefan	22.08
Michael	22.37
Roland	22.02
Oliver	22.26
David	21.94
Brett	22.18
Jason	22.11

Who finished the swim with the third fastest time?

- F. Gary
- G. Roland
- H. David
- J. Brett

33. Mr. Conrad has a total of 657 newspapers to be delivered. He makes 36 stacks with the same number of newspapers in each stack. Which could show how many newspapers are in each stack and how many are left over?

- A. 18 in each stack with 9 left over
- B. 28 in each stack with none left over
- C. 36 in each stack with none left over
- D. 65 in each stack with 7 left over

34. A company prints 4580 copies of the same book. The number of pages in the book, including the cover pages, is 79.

What is the total number of pages, including the cover pages, that the company prints?

- F. 4580
- G. 4659
- H. 331,920
- J. 361,820

35. George wrote the following fractions.

$$\frac{2}{3}, \frac{4}{5}, \frac{1}{6}, \frac{4}{10}, \frac{1}{3}$$

What is the sum of the five fractions?

- A. $\frac{11}{30}$
- B. $\frac{18}{27}$
- C. $2\frac{1}{30}$
- D. $2\frac{11}{30}$

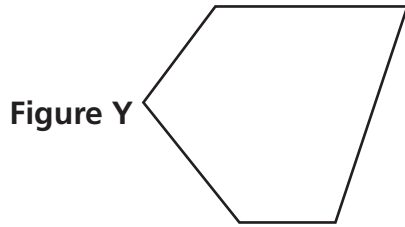
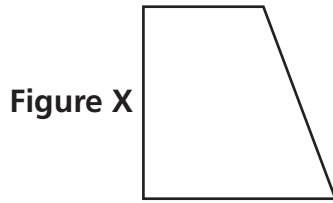
36. Rebecca plans to purchase buttons that have the same diameter as the one shown below.



Which is closest to the diameter of the button?

- F. 0.09 meter
- G. 0.9 decimeter
- H. 9 centimeters
- J. 9 millimeters

37. You may use a ruler to help answer this question.



Compare the perimeter of the three figures above.

Which of the statements below is true?

- A. The perimeter of Figure X is greater than the perimeter of Figure Y.
- B. The perimeter of Figure Z is greater than the perimeter of Figure X.
- C. The perimeter of Figure Y is greater than the perimeter of Figure Z.
- D. The perimeter of Figure X is greater than the perimeter of Figure Z.

38. The table shows the numbers of certain items sold at Bob's stationery shop last week.

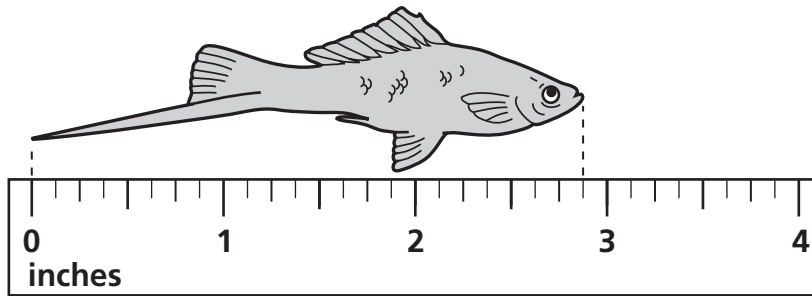
Items Sold

Item	Number sold
Pen	45
Eraser	72
Pencil	57
Ruler	36
Notebook	72
Clip Board	47

What is the mode of the data shown in the table?

- F. 36
- G. 47
- H. 57
- J. 72

39. Lacy uses the ruler below to measure the length of a swordtail fish.



Which is the closest estimate to the length of the swordtail?

- A. 2 inches
- B. $2\frac{1}{2}$ inches
- C. 3 inches
- D. $3\frac{1}{2}$ inches

40. Human hair can grow an average of 1.27 centimeters every month.

Which shows this length in millimeters?

- F. 0.127 millimeter
- G. 12.7 millimeters
- H. 127 millimeters
- J. 1270 millimeters

41. Marilyn wrote two factors of 300.

Which could be the numbers she wrote?

- A. 2, 9
- B. 5, 7
- C. 6, 8
- D. 6, 10

42. Harlan needs $3\frac{2}{3}$ cups of flour to make a cake, $2\frac{1}{3}$ cups of flour to make banana bread, and $2\frac{1}{2}$ cups of flour to make dinner rolls.

What is the total amount of flour Harlan needs to make the three items?

- F. 7 cups
G. 8 cups
H. $8\frac{1}{2}$ cups
J. $9\frac{1}{2}$ cups

43. Kara measured the length and width of the top of her kitchen table.

Which unit of measure could she have used?

- A. Liter
B. Centiliter
C. Kilogram
D. Centimeter

44. Simon used the expression 6×5 to find the area of a rectangle. He used the Commutative Property of Multiplication and created an equivalent expression.

Which of the following expressions did Simon create?

- F. $30(5)$
G. $6 + 5$
H. $5 - 6$
J. 5×6

45. Kevin paints an average of 6 bird houses each day. He uses the equation below to find t , the total number of bird houses he could paint in 30 days.

$$30 \times 6 = t$$

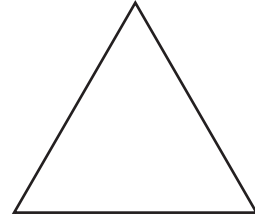
Which of the following equations is equivalent?

- A. $30 - t = 6$
B. $6t = 30$
C. $t + 6 = 30$
D. $\frac{t}{30} = 6$

46. Which of the following statements describes how to use an inverse operation to solve the equation $c + 6 = 16$?

- F. Multiply both sides of the equation by six because multiplication is the inverse operation of addition.
- G. Subtract six from both sides of the equation because subtraction is the inverse operation of addition.
- H. Add six to both sides of the equation because addition is the inverse operation of subtraction.
- J. Divide both sides of the equation by six because division is the inverse operation of addition.

48. Which three-dimensional solid has at least one face that is congruent to the following two-dimensional shape?



- F. Rectangular pyramid
- G. Rectangular prism
- H. Cube
- J. Cone

47. Ted used the expression $10 + c + 2c$ to show the total number of ice-cream cones he sold in one day. Ted used the Commutative Property of Addition and created an equivalent expression.

Which of the following expressions did Ted create?

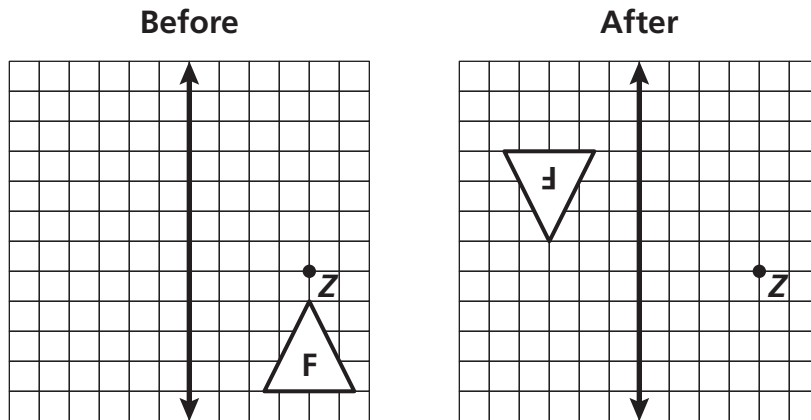
- A. $2c + c + 10$
- B. $2 \times (c + c) + 10$
- C. $2(c + 5) + 2c$
- D. $4c + 10$

49. One baseball weighs about 5 ounces. A group of baseballs had a total weight of about 1 pound, 9 ounces.

How many baseballs were in the group?

- A. 2
- B. 5
- C. 7
- D. 9

50. Kay graphed triangle F on the "Before" grid. Then she used a combination of two transformations to move triangle F to the position on the "After" grid.



Which of these transformations could Kay have used to move triangle F from the "Before" position to the "After" position?

- F. She rotated the triangle 90° clockwise around Point Z and then translated it 7 units to the left.
- G. She reflected the triangle over the line and then translated it 5 units up.
- H. She rotated the triangle 180° clockwise around Point Z and then translated it 7 units to the left.
- J. She reflected the triangle over the line and then translated it 2 units up.
-
51. There are 12 girls in one of the fifth grade classes. The number of girls is two-thirds the number of boys, b . The number of boys can be found using the equation $\frac{2}{3}b = 12$. How many boys are in the class?
- A. 8
B. 12
C. 13
D. 18
52. Brendon sells tires at the local auto parts store. He told a customer that the tire width for a new tire was 21.5 centimeters. Which of the following describes the tire width for the new tire?
- F. 21.5 feet
G. 215 inches
H. 21.5 meters
J. 215 millimeters

53. The times it took the members of a swim team to complete an event are shown in the table below.

Swimming Event

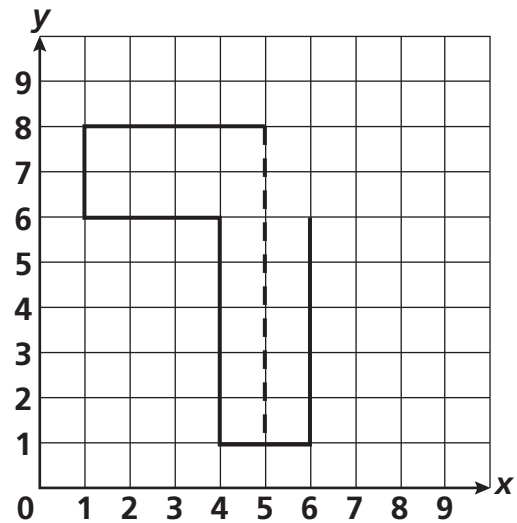
Name	Time Taken (minutes)
Judy	11
Derek	13
Hal	17
Dora	9
Tim	18
Fanny	15
Zach	12
Troy	10
Andy	19
Laura	?

The range of the data including the time taken by Laura is 12.

What was the time in minutes taken by Laura?

- A. 10
- B. 13
- C. 20
- D. 21

54. Jarred is completing a drawing of a letter T. The dashed line represents a line of symmetry.



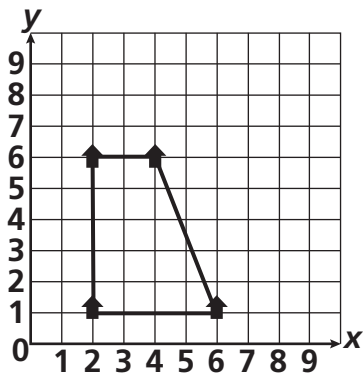
Which ordered pairs does Jarred still need to plot to locate the last two vertices of the drawing?

- F. (1, 6) and (1, 8)
- G. (6, 1) and (6, 6)
- H. (6, 9) and (8, 8)
- J. (9, 6) and (9, 8)

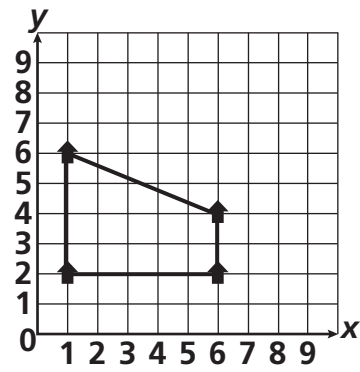
55. Phil plotted four points on a coordinate grid to represent the four posts at the corners of his property. The coordinates of the points are $(1, 2)$, $(1, 6)$, $(6, 4)$, and $(6, 2)$.

Which coordinate grid below best shows the four points plotted?

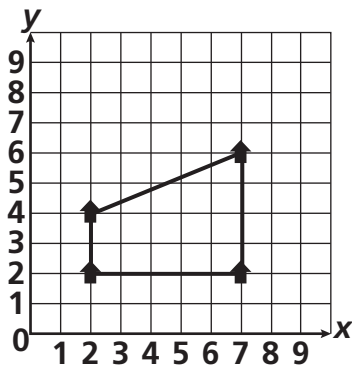
A.



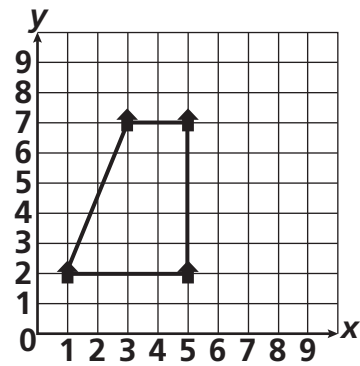
C.



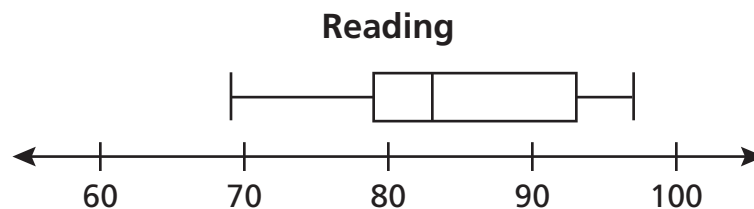
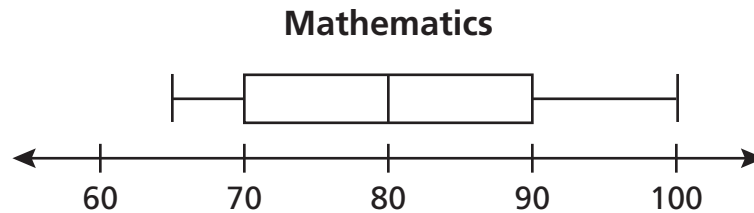
B.



D.



56. Tanner created the box-and-whisker plots below using his mathematics and reading test grades.



If Tanner wants to compare his median grades, which of the following statements is true?

- F. Tanner's median grade is higher in mathematics than reading because the whisker on the right is larger for his mathematics scores than his reading scores.
- G. Tanner's median grade is higher in mathematics than reading because the box-and-whisker plot for mathematics is higher than it is for reading.
- H. Tanner's median grade is higher in reading than mathematics because the box on the right is larger for his reading scores than his mathematics scores.
- J. Tanner's median grade is higher in reading than mathematics because the middle mark inside the box for reading is higher than the middle mark inside the box for mathematics.

57. The table below shows the number of DVDs a store rented in the first 7 months of last year.

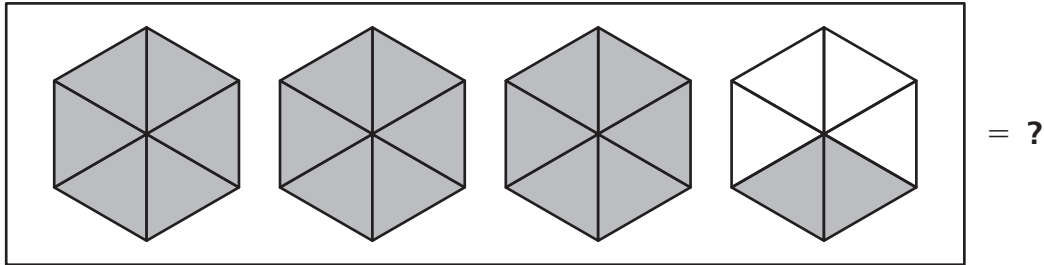
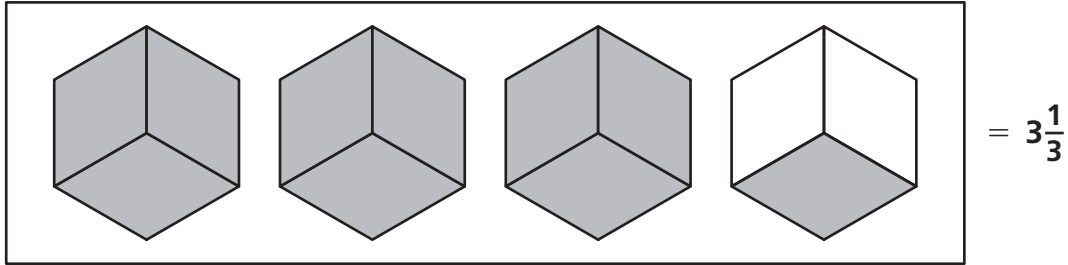
DVD Rentals

Month	Number of Rentals
January	219
February	174
March	138
April	395
May	442
June	519
July	604

Which of the following justifies the closest estimation of the difference between the number of DVDs rented in the last four months and the number of DVDs rented in the first three months?

- A. $200 + 200 + 100 + 400 = 900$ and
 $400 + 500 + 600 = 1,500$ and
 $1,500 - 900 = 600$
- B. $200 + 200 + 100 + 400 + 400 = 1,300$ and
 $500 + 600 = 1,100$ and
 $1,300 - 1,100 = 200$
- C. $100 + 400 + 400 + 500 + 600 = 2,000$ and
 $200 + 200 = 400$ and
 $2,000 - 400 = 1,600$
- D. $400 + 400 + 500 + 600 = 1,900$ and
 $200 + 200 + 100 = 500$ and
 $1,900 - 500 = 1,400$

58. The two mixed numbers modeled below are equivalent.



Which of these represents the value of the shaded part of the second model?

- F. $3\frac{2}{6}$
- G. $3\frac{2}{4}$
- H. $6\frac{2}{6}$
- J. $6\frac{2}{4}$

59. The number of people who used the skating rink in one week is shown in the table below.

Skating Rink

Day	Number of People
Monday	17
Tuesday	23
Wednesday	20
Thursday	20
Friday	26
Saturday	32
Sunday	37

What is the mean of the numbers in the table?

- A. 20
- B. 22
- C. 23
- D. 25

60. Gretchen had \$3.83. She gave \$1.85 to her sister.

How much money did Gretchen have left?

- F. \$1.98
- G. \$2.00
- H. \$2.02
- J. \$2.08

BE SURE YOU HAVE MARKED ALL YOUR ANSWERS
ON THE ANSWER DOCUMENT.



GRADE

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**MATHEMATICS
PRACTICE TEST**