Chapter 1 Get Ready Answers

Question 1

All numbers are compared to zero. Negative numbers are placed to the left of zero. Positive numbers are placed to the right of zero.

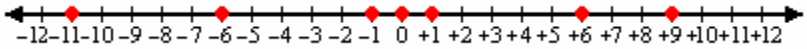
a) The letters on the number line represent the following integers: A = +1, B = –2, C = +4, D = –4.

b) The letters on the number line represent the following integers: N = –5, P = –15, Q = +10.

Question 2

Find the numbers with the greatest and least values. Place –11 to the left of zero, and 9 to the right of zero along the number line. Space integers evenly between the end numbers. Then, locate 6, 0, –1, 9, –11, –6, and 1.

a)



b) By listing the numbers plotted on the number line in part a) from right to left, the numbers will be in order from greatest to least. Negative numbers are listed to the left of zero. Positive numbers are listed to the right of zero. The list of integers in order from greatest to least is 9, 6, 1, 0, –1, –6, –11.

Question 3

a) There are 6 moves that can be counted on the number line between 4 and 10.

b) There are 6 moves that can be counted on the number line between –2 and –8.

c) There are 9 moves that can be counted on the number line between –12 and –3.

d) There are 10 moves that can be counted on the number line between +7 and –3.

e) There are 24 moves that can be counted on the number line between –12 and 12.

f) There are 11 moves that can be counted on the number line between 0 and –11.

Chapter 1 Get Ready Answers (continued)

Question 4

Draw an integer number line using evenly spaced numbers. On the number line, count the number of moves as indicated.

a) From 0, count 4 spaces to the left; A = –4.

b) From 0, count 3 spaces to the right; B = 3.

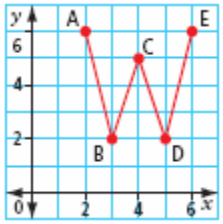
c) From 3, count 6 spaces to the left; C = –3.

d) From –2, count 7 spaces to the right; D = 5.

Question 5

Point F is 4 units to the right of the *y*-axis. The *x*-coordinate is 4. Point F is 3 units up from the *x*-axis. The *y*-coordinate is 3. Point F has the coordinates F(4, 3).
Point G is 0 units from the *y*-axis. The *x*-coordinate is 0. It is 0 units from the *x*-axis. The *y*-coordinate is 0. Point G has the coordinates G(0, 0).
Point H is 0 units from the *y*-axis. The *x*-coordinate is 0. It is 2 units up from the *x*-axis. The *y*-coordinate is 2. Point H has the coordinates H(0, 2).
Point I is 2 units to the right of the *y*-axis. The *x*-coordinate is 2. It is 2 units up from the *x*-axis. The *y*-coordinate is 2. Point I has the coordinates I(2, 2).
Point J is 3 units to the right of the *y*-axis. The *x*-coordinate is 3. It is 0 units from the *x*-axis. The *y*-coordinate is 0. Point J has the coordinates J(3, 0).

Question 6



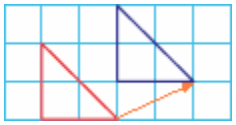
a) For point A(2, 6), count 2 units to the right of the *y*-axis and 6 units up from the *x*-axis.
For point B(3, 2), count 3 units to the right of the *y*-axis and 2 units up from the *x*-axis.
For point C(4, 5), count 4 units to the right of the *y*-axis and 5 units up from the *x*-axis.
For point D(5, 2), count 5 units to the right of the *y*-axis and 2 units up from the *x*-axis.
For point E(6, 6), count 6 units to the right of the *y*-axis and 6 units up from the *x*-axis.

b) The letter W is formed.

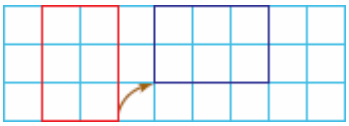
Chapter 1 Get Ready Answers (continued)

Question 7

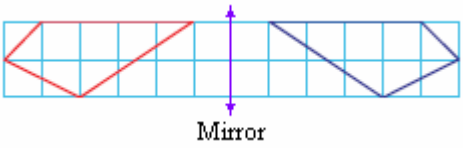
a) This is a translation two units right and one unit up.



b) This is a clockwise rotation of 90° about a point one unit to the right of the lower right vertex of the red figure.

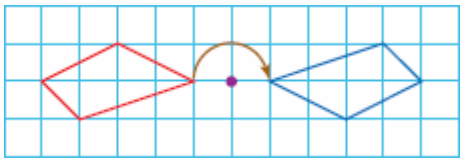


c) This is a mirror image or a reflection in the line shown. All vertices of the quadrilateral and its image are equal distances from the vertical line that separates them.

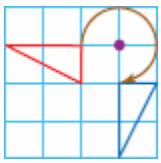


Question 8

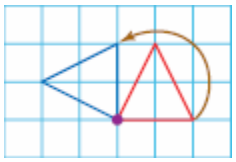
a) The angle of rotation is 180°, since the figure is rotated one half circle. The rotation is clockwise as indicated by the arrow.



b) The angle of rotation is 270°, since the figure is rotated three quarters of a circle. The rotation is clockwise as indicated by the arrow.



c) The angle of rotation is 90°, since the figure is rotated one quarter of a circle. The rotation is counterclockwise as indicated by the arrow.



d) The angle of rotation is 360°, since the figure is rotated one full circle. The rotation is counterclockwise as indicated by the arrow.