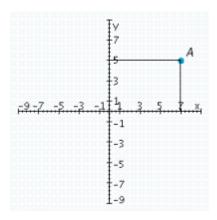
## **Section 2.1**

## MULTIPLE CHOICE

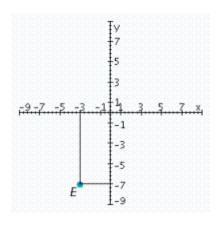
1. Refer to the accompanying figure and determine the coordinates of the given point and the quadrant in which it is located.



- a. (7, 5); Quadrant III
- b. (-7, -5); Quadrant IV
- c. (7, 5); Quadrant I
- d. (-7, 5); Quadrant II

ANS: C PTS: 1

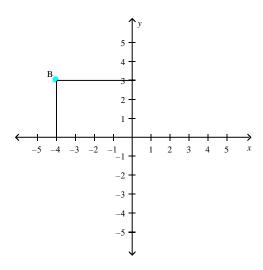
2. Refer to the accompanying figure and determine the coordinates of the given point and the quadrant in which it is located.



- a. (-3, 7); Quadrant II
- b. (3, 7); Quadrant I
- c. (-3, -7); Quadrant IV
- d. (-3, -7); Quadrant III

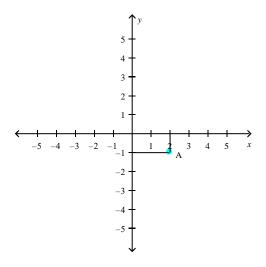
ANS: D PTS: 1

3. Refer to the accompanying figure and determine the coordinates of the given point and the quadrant in which it is located.



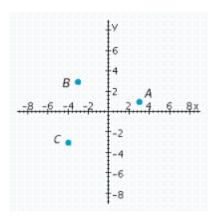
- a. (4, 3); Quadrant I
- b. (-4, 3); Quadrant II
- c. (-4, 0); Quadrant II
- d. (-4, -3); Quadrant III
- e. (4, -3); Quadrant IV

4. Refer to the accompanying figure and determine the coordinates of the given point and the quadrant in which it is located.

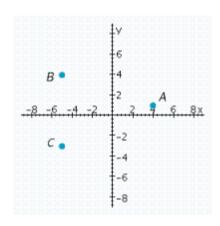


- a. (2, 1); Quadrant I
- b. (2, -1); Quadrant IV
- c. (-2, -1); Quadrant III
- d. (-2, 1); Quadrant II
- e. (-2, 0); Quadrant II

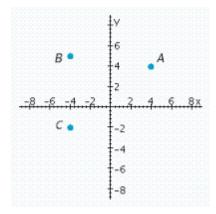
5. Which point has coordinates (-3, 3)?



- a. *A*
- b. *C*
- c. *B*
- ANS: C
- PTS: 1
- 6. What are the coordinates of point B?



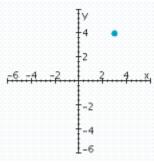
- a. (-5,4)
- b. (-5, -3)
- c. (4, 1)
- ANS: A
- PTS: 1
- 7. Which point has a negative *x*-coordinate and a negative *y*-coordinate?



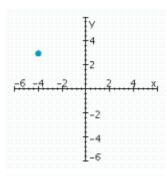
- a. *B*
- b. *C*
- c. A
- ANS: B
- PTS: 1
- 8. Sketch a set of coordinate axes and plot the given point.

(-4, 3)

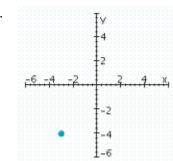
a.



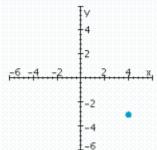
c.



b.



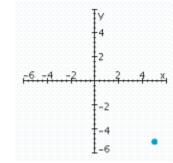
d.

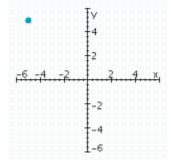


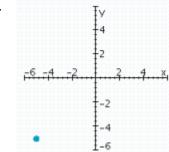
- ANS: C
- PTS: 1
- 9. Sketch a set of coordinate axes and plot the given point.

(5, 5)

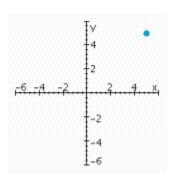
a.







d.



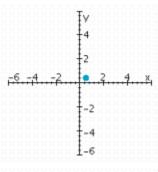
ANS: D

PTS: 1

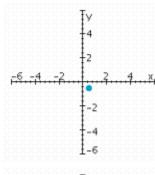
10. Sketch a set of coordinate axes and plot the given point.

$$\left(-\frac{1}{2},\frac{1}{2}\right)$$

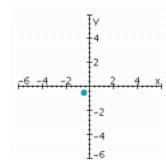
a.



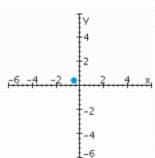
c.



b.



d.

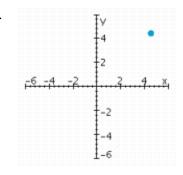


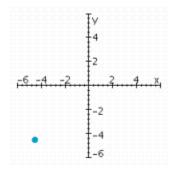
ANS: D

11. Sketch a set of coordinate axes and plot the given point.

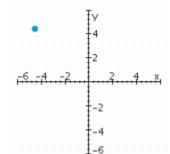
$$(4.5, -4.5)$$

a.

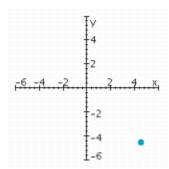




b.



d.

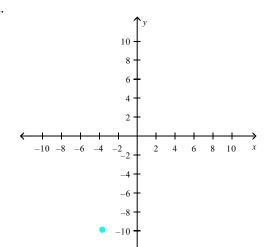


ANS: D

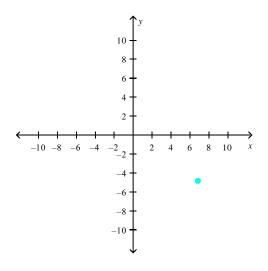
PTS: 1

12. Sketch a set of coordinate axes and plot the given point.

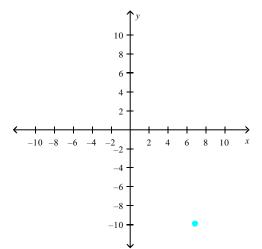
a.



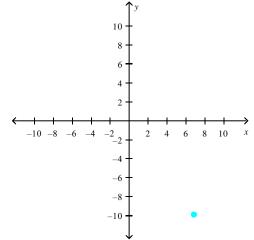
d.

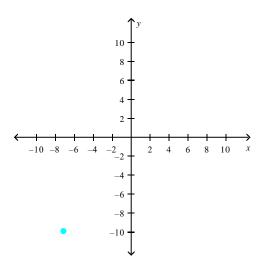


b.



e.





ANS: B

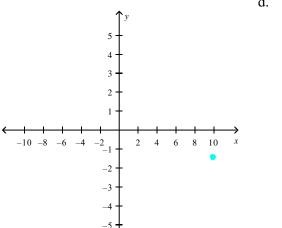
PTS: 1

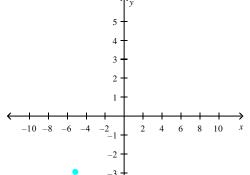
13. Sketch a set of coordinate axes and plot the given point.

$$\left(10,-\frac{3}{2}\right)$$

a.

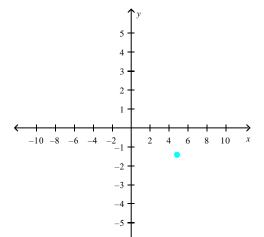
d.

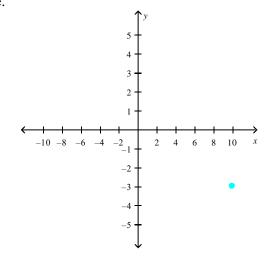


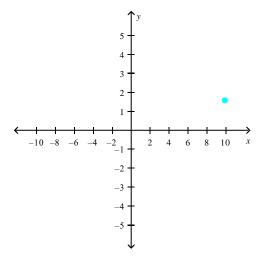


b.

e.







ANS: A

PTS: 1

14. Find the slope of the line that passes through the given pair of points.

(-1, 2) and (3, 4)

a. 
$$m = -\frac{2}{1}$$

b. 
$$m = -\frac{1}{2}$$

c. 
$$m = \frac{2}{1}$$

d. 
$$m = \frac{1}{2}$$

ANS: D

PTS: 1

15. Find the slope of the line that passes through the given pair of points.

(2, 2) and (8, 5)

ANS: E

PTS: 1

16. Find the slope of the line that passes through the pair of points.

(-a+1, b-1) and (a+1, -b)

a. 
$$m = \frac{1 - 2b}{2a}$$

b. 
$$m = \frac{2b-1}{2a}$$

c. 
$$m = \frac{2b}{1 - 2a}$$

$$d. \quad m = \frac{2a}{1 - 2b}$$

e. 
$$m = \frac{1 - 2b}{2a + 1}$$

ANS: A

PTS: 1

17. Determine whether the lines through the given pairs of points are parallel.

$$A(2, -3), B(-2, -11)$$
 and  $C(1, 2), D(-1, 6)$ 

- a. The lines through the given pairs of points are not parallel.
- b. The lines through the given pairs of points are parallel.

ANS: A

PTS: 1

18. Determine whether the lines through the pair of points are parallel.

$$A(1,3), B(1,-5) \text{ and } C(-1,4), D(-1,2)$$

- a. yes
- b. no

ANS: A

PTS: 1

19. If the line passing through the points (2, a) and (5, -3) is parallel to the line passing through the points (4, 8) and (-5, a + 1), what is the value of a?

- a. a = -8
- b. a = 4
- c. a = -4
- d. a = 8

ANS: A

PTS: 1

20. If the line passing through the points (a, 2) and (6, 7) is parallel to the line passing through the points (4, 8) and (a + 3, 2), what is the value of a?

- a. a = 32
- b. a = 35
- c. a = 31
- d. a = 34
- e. a = 33

ANS: C

PTS: 1