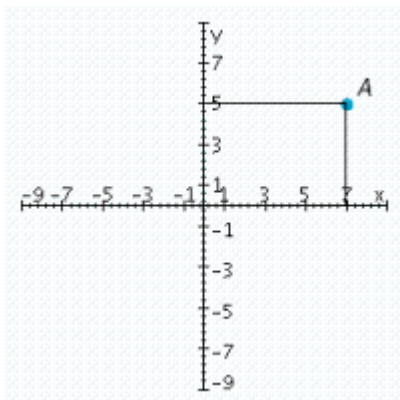


**Section 2.1**

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**MULTIPLE CHOICE**

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

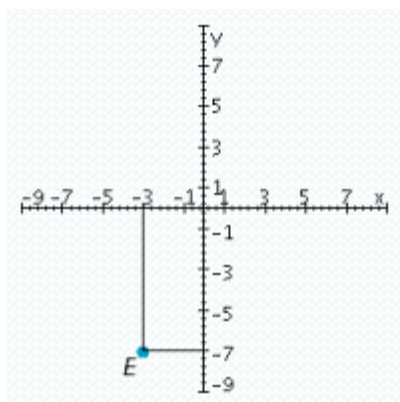


- a.  $(7, 5)$ ; Quadrant III
- b.  $(-7, -5)$ ; Quadrant IV
- c.  $(7, 5)$ ; Quadrant I
- d.  $(-7, 5)$ ; Quadrant II

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.

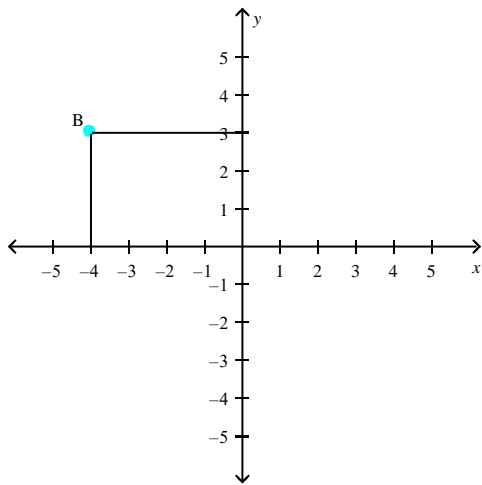


- a.  $(-3, 7)$ ; Quadrant II
- b.  $(3, 7)$ ; Quadrant I
- c.  $(-3, -7)$ ; Quadrant IV
- d.  $(-3, -7)$ ; Quadrant III

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.

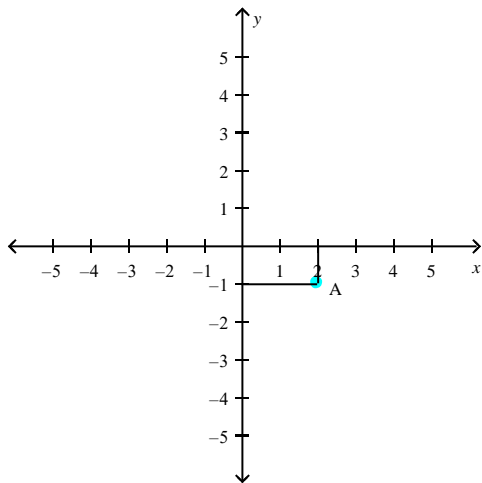


- a.  $(4, 3)$ ; Quadrant I
- b.  $(-4, 3)$ ; Quadrant II
- c.  $(-4, 0)$ ; Quadrant II
- d.  $(-4, -3)$ ; Quadrant III
- e.  $(4, -3)$ ; Quadrant IV

ANS: B

PTS: 1

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

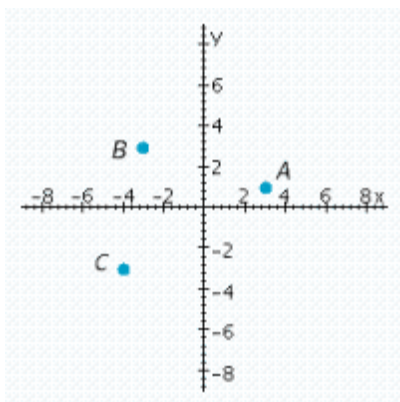


- a.  $(2, 1)$ ; Quadrant I
- b.  $(2, -1)$ ; Quadrant IV
- c.  $(-2, -1)$ ; Quadrant III
- d.  $(-2, 1)$ ; Quadrant II
- e.  $(-2, 0)$ ; Quadrant II

ANS: B

PTS: 1

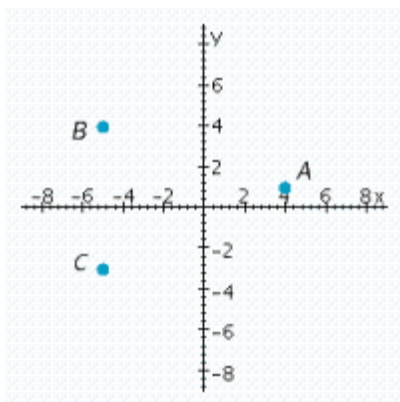
5. Which point has coordinates  $(-3, 3)$ ?



- a. A
- b. C
- c. B

ANS: C                      PTS: 1

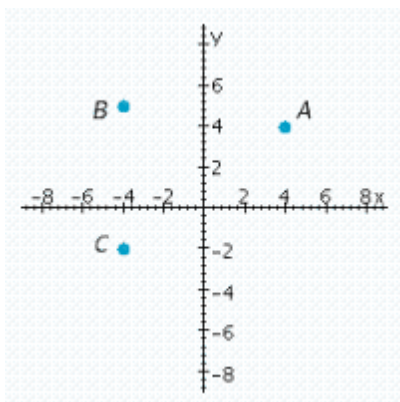
6. What are the coordinates of point B?



- 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?



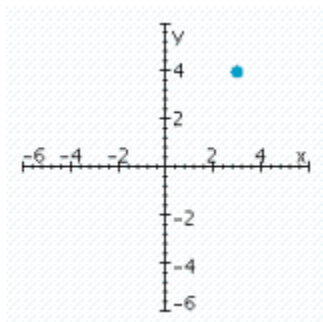
- a. *B*
- b. *C*
- c. *A*

ANS: B PTS: 1

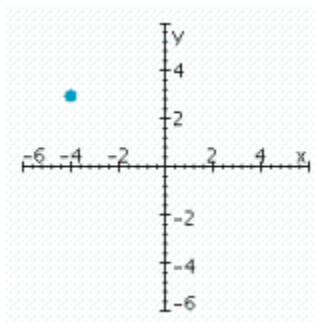
8. Sketch a set of coordinate axes and plot the given point.

$(-4, 3)$

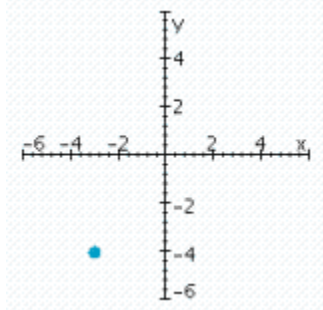
a.



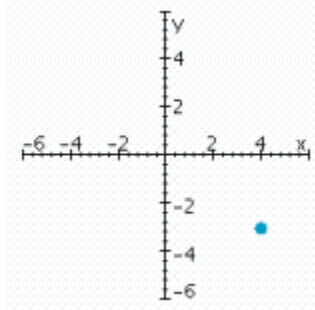
c.



b.



d.

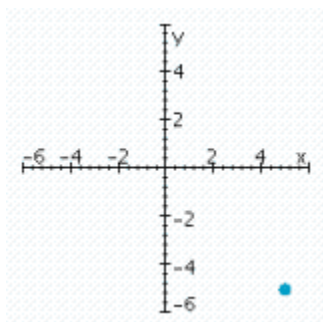


ANS: C PTS: 1

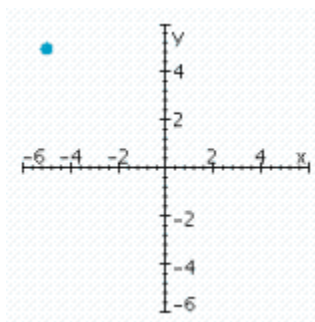
9. Sketch a set of coordinate axes and plot the given point.

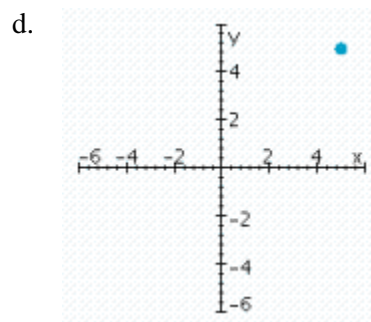
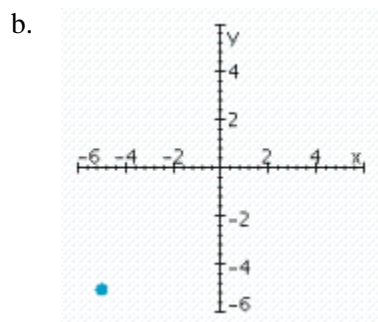
$(5, 5)$

a.



c.

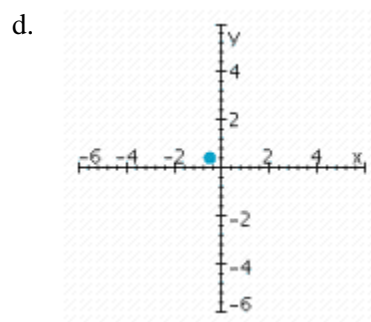
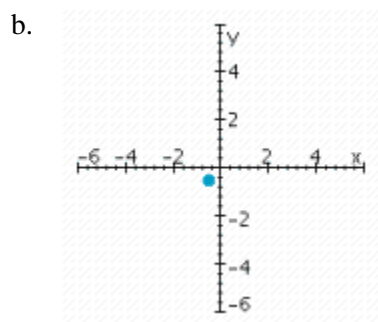
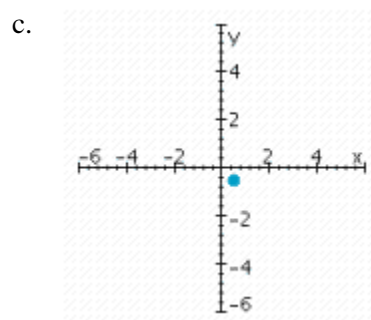
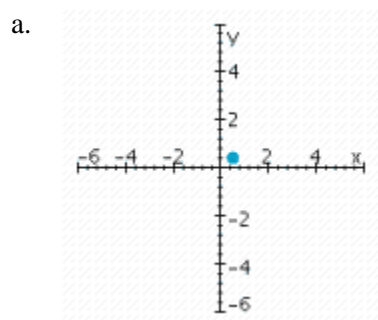




ANS: D PTS: 1

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

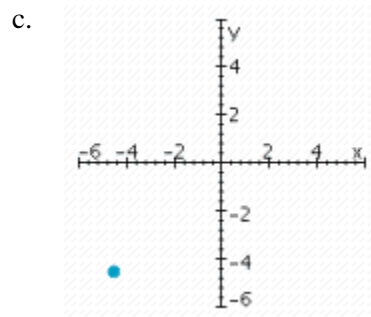
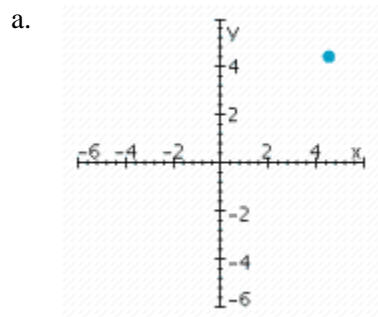
$$\left(-\frac{1}{2}, \frac{1}{2}\right)$$



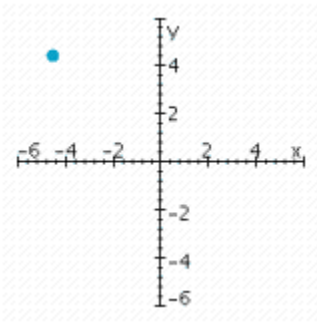
ANS: D PTS: 1

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

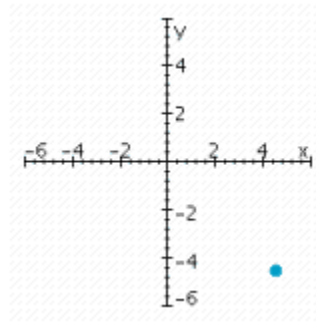
$$(4.5, -4.5)$$



b.



d.



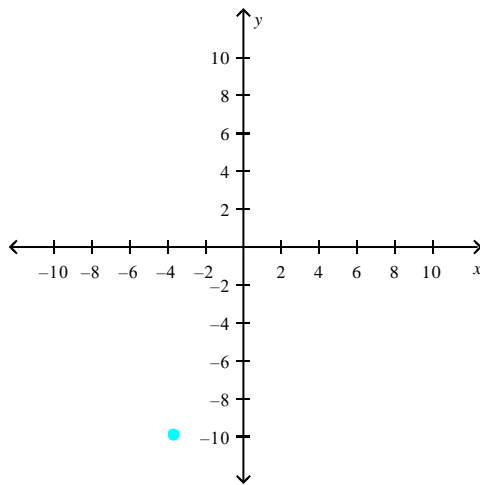
ANS: D

PTS: 1

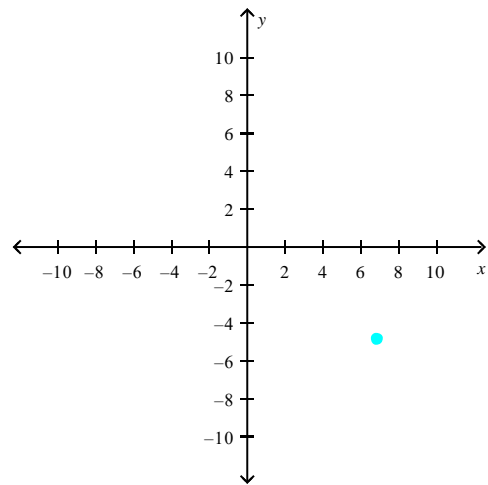
12. Sketch a set of coordinate axes and plot the given point.

$(7, -10)$

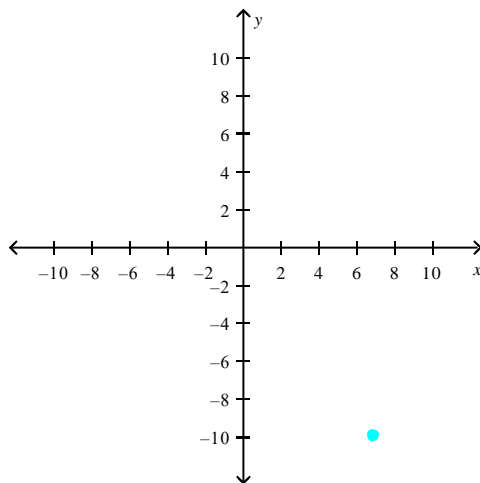
a.



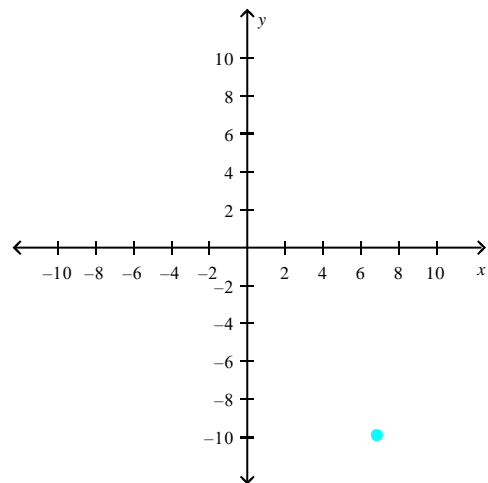
d.



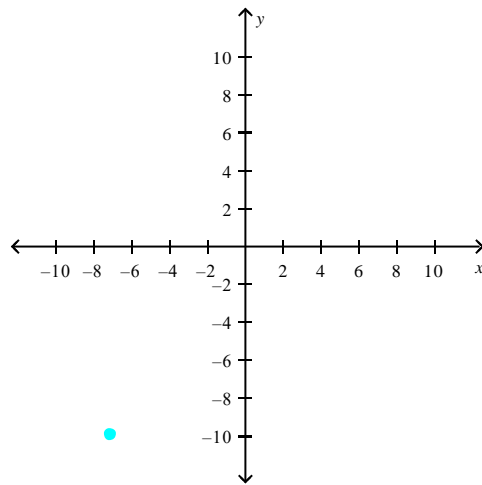
b.



e.



c.



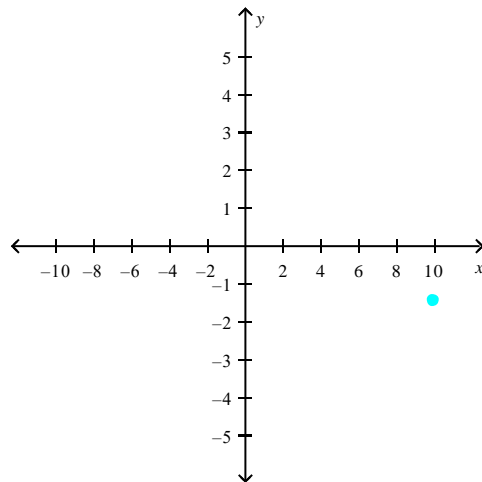
ANS: B

PTS: 1

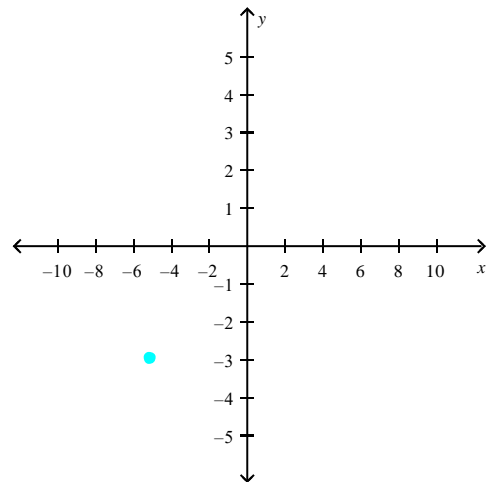
13. Sketch a set of coordinate axes and plot the given point.

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

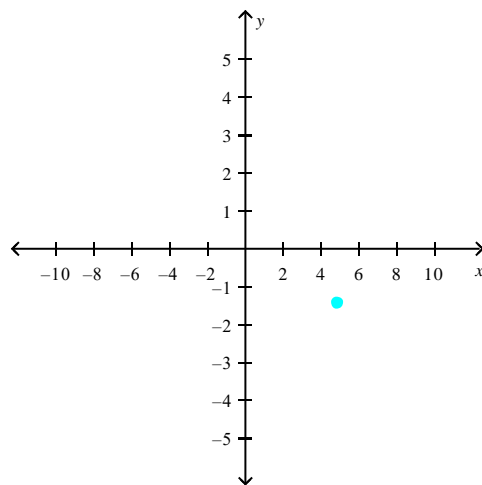
a.



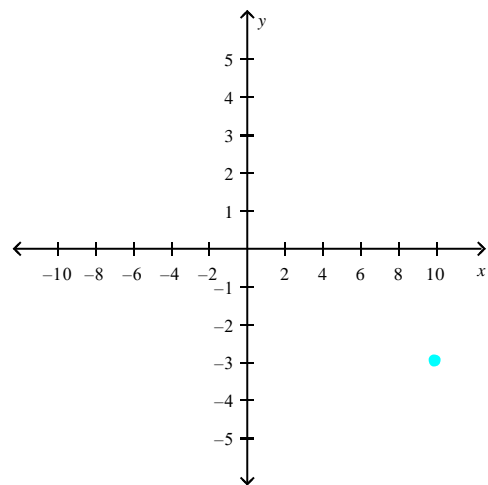
d.



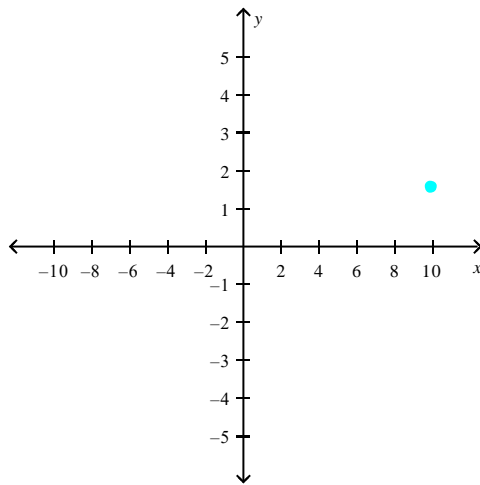
b.



e.



c.



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  $(8, 5)$

- a.  $-\frac{1}{2}$
- b.  $-\frac{2}{10}$
- c.  $\frac{7}{10}$
- d.  $\frac{7}{8}$
- e.  $\frac{1}{2}$

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

$A(1, 3)$ ,  $B(1, -5)$  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