

1. Plot each point in the xy -plane. Tell in which quadrant or on what coordinate axis each point lies.

$A = (-6, 4)$

$D = (5, 0)$

$B = (1, -2)$

$E = (0, -4)$

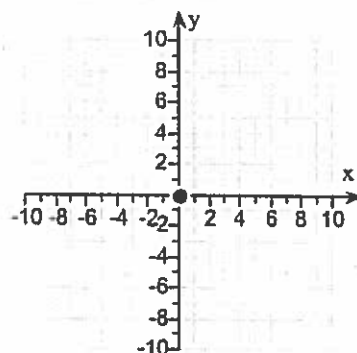
$C = (1, 4)$

$F = (-6, -2)$

Plot the point $A = (-6, 4)$.

In which quadrant or on what axis does point A lie?

- ☐ A. Quadrant I ☐ B. y -axis
☐ C. x -axis ☐ D. Quadrant IV
☐ E. Quadrant III ☐ F. Quadrant II

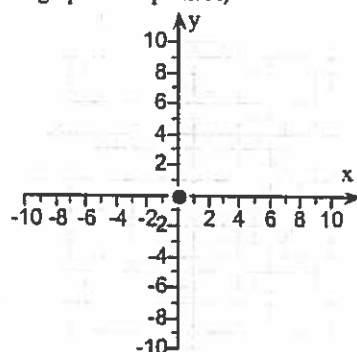


Plot the point $B = (1, -2)$.

In which quadrant or on what axis does the point B lie?

- ☐ A. Quadrant II ☐ B. Quadrant I
☐ C. x -axis ☐ D. Quadrant IV
☐ E. y -axis ☐ F. Quadrant III

(This graph is for point A)

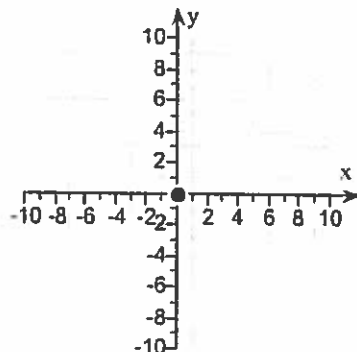


Plot the point $C = (1, 4)$.

In which quadrant or on what axis does the point C lie?

- ☐ A. Quadrant III ☐ B. Quadrant IV
☐ C. Quadrant I ☐ D. x -axis
☐ E. Quadrant II ☐ F. y -axis

(This graph is for point B)



Plot the point $D = (5, 0)$.

In which quadrant or on what axis does the point D lie?

(This graph is for point C)

1. (cont.)
- ☐ A. Quadrant IV ☐ B. Quadrant III
☐ C. x-axis ☐ D. y-axis
☐ E. Quadrant I ☐ F. Quadrant II

Plot the point $E = (0, -4)$.

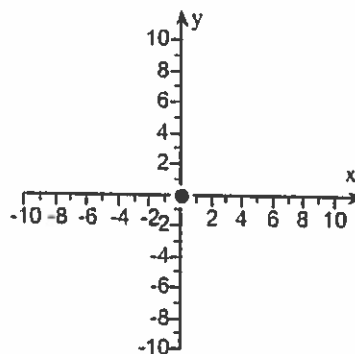
In which quadrant or on what axis does the point E lie?

- ☐ A. Quadrant III ☐ B. Quadrant II
☐ C. x-axis ☐ D. Quadrant IV
☐ E. Quadrant I ☐ F. y-axis

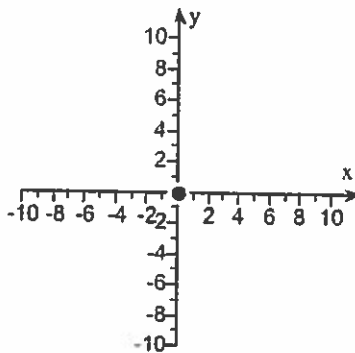
Plot the point $F = (-6, -2)$.

In which quadrant or on what axis does the point F lie?

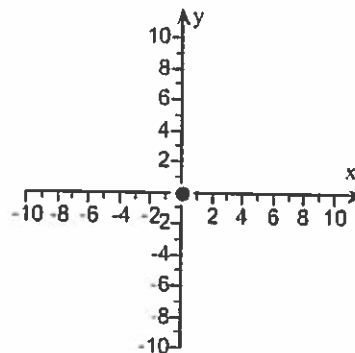
- ☐ A. Quadrant I ☐ B. y-axis
☐ C. x-axis ☐ D. Quadrant IV
☐ E. Quadrant III ☐ F. Quadrant II



(This graph is for point D)



(This graph is for point E)



(This graph is for point F)

2. Determine the coordinates of each of the points plotted. Tell in which quadrant or on what coordinate axis each point lies.

A = (Type an ordered pair.)

In which quadrant or on what axis does point A lie?

- ☐ A. Quadrant I ☐ B. x-axis
☐ C. y-axis ☐ D. Quadrant IV
☐ E. Quadrant III ☐ F. Quadrant II

B = (Type an ordered pair.)

In which quadrant or on what axis does the point B lie?

- ☐ A. Quadrant I ☐ B. x-axis
☐ C. Quadrant III ☐ D. y-axis
☐ E. Quadrant IV ☐ F. Quadrant II

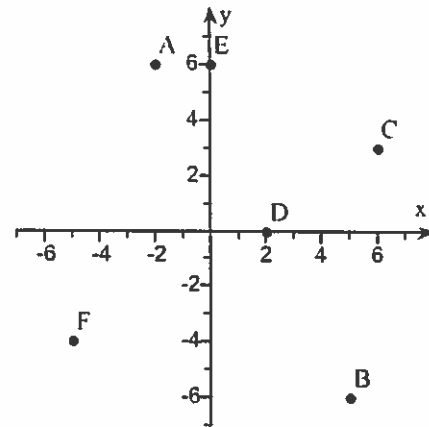
C = (Type an ordered pair.)

In which quadrant or on what axis does the point C lie?

- ☐ A. Quadrant II ☐ B. y-axis
☐ C. Quadrant I ☐ D. x-axis
☐ E. Quadrant III ☐ F. Quadrant IV

D = (Type an ordered pair.)

In which quadrant or on what axis does the point D lie?



2.

(cont.)

- ☐ A. Quadrant III ☐ B. x-axis
☐ C. Quadrant IV ☐ D. y-axis
☐ E. Quadrant II ☐ F. Quadrant I

E = (Type an ordered pair.)

In which quadrant or on what axis does the point E lie?

- ☐ A. x-axis ☐ B. Quadrant III
☐ C. Quadrant IV ☐ D. Quadrant II
☐ E. Quadrant I ☐ F. y-axis

F = (Type an ordered pair.)

In which quadrant or on what axis does the point F lie?

- ☐ A. Quadrant I ☐ B. Quadrant II
☐ C. Quadrant III ☐ D. y-axis
☐ E. x-axis ☐ F. Quadrant IV

3.

Solve for y.

$$3x + y = 9$$

y =

4.

Solve for y.

$$8x - 2y = 14$$

y = (Simplify your answer.)

Date: _____

Time: _____

Course: MATH110 AB15 Sum 15

Book: Tobey: Beginning and Intermediate
Algebra, 4e

5. Solve the equation for y.

$$4x + 8y = 32$$

$$y = \square$$

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

6. Determine whether the given points are on the graph of the equation.

$$2x + 3y = 9$$

- (a) (3,1) (b) (6, -1) (c) (4,3)

(a) Is (3,1) a solution to the given equation?

☐ No

☐ Yes

(b) Is (6, -1) a solution to the given equation?

☐ No

☐ Yes

(c) Is (4,3) a solution to the given equation?

☐ No

☐ Yes

7. a) Solve for y.

$$y - 3 = -\frac{4}{5}x$$

b) Find the missing coordinate to complete the ordered pair (10,).

a) The equation solved for y is $y = \square$.

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

b) The completed ordered pair is (10, $\square$).

(Simplify your answer.)

8. a) Solve the equation for y.

$$8x + y = 12$$

- b) Find the missing coordinate to complete the ordered pair (3,).

- a) The equation solved for y is $y = \square$.

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

- b) The complete ordered pair is (3, $\square$).

(Simplify your answer.)

9. a) Solve the following equation for y.

$$5x + 6y = 30$$

- b) Find the missing coordinate to complete the ordered pair (6,).

- a) The equation solved for y is $y = \square$.

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

- b) The complete ordered pair is (6, $\square$).

(Simplify your answer.)

10. Find the missing coordinate to complete the ordered-pair solution to the given linear equation.

$$y = 3x + 6$$

- (a) (0, ?)

- (b) (5, ?)

- (a) (0, $\square$)

- (b) (5, $\square$)

11. Find the missing coordinates to complete the following ordered-pair solutions to the given linear equation.

$$y + 6x = 7$$

(a) $(-1, \quad)$

(b) $(4, \quad)$

(a) The ordered-pair solution is $(-1, \boxed{})$.

(b) The ordered-pair solution is $(4, \boxed{})$.

12. Find the missing coordinate to complete the ordered-pair solution to the given linear equation.

$$3x - 5y = 2$$

(a) $(-1, \quad)$

(b) $(\quad, 2)$

(a) The ordered-pair solution is $(-1, \boxed{})$.

(b) The ordered-pair solution is $(\boxed{}, 2)$.

13. Find the missing coordinate to complete the ordered-pair solution to the given linear equation.

$$7y + 4x = -28$$

(a) $(-7, ?)$

(b) $(?, 4)$

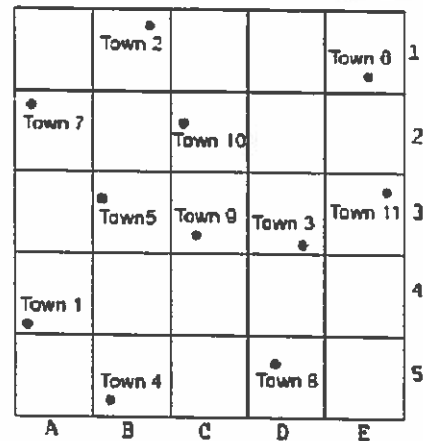
(a) $(-7, \boxed{})$

(b) $(\boxed{}, 4)$

14. The map to the right shows the layout of towns in a particular county. Like many maps used in driving or flying, it has horizontal and vertical grid markers for ease of use. Use the grid labels to indicate the location of Town 4.

Choose the location of Town 4.

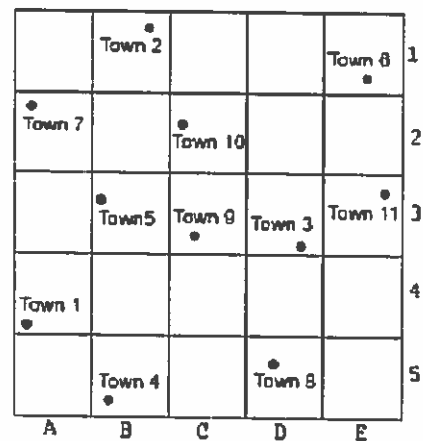
- ☐ B3
☐ E3
☐ E5
☐ B5



15. The map to the right shows the layout of towns in a particular county. Like many maps used in driving or flying, it has horizontal and vertical grid markers for ease of use. Use the grid labels to indicate the location of Town 1.

Choose the location of Town 1.

- ☐ D5
☐ A4
☐ D4
☐ A5



16. The map to the right shows the layout of towns in a particular county. Like many maps used in driving or flying, it has horizontal and vertical grid markers for ease of use. Use the grid labels to indicate the location of Town 9.

Choose the location of Town 9.

- ☐ B3
☐ B1
☐ C3
☐ C1

