

Chapter 5 Review

In This Chapter, You Have Learned

- To name the parts of a coordinate plane
- To locate points on a coordinate plane
- To use and graph a table of x - and y -values
- To recognize a graph that is horizontal or vertical
- To find the slope of a line
- To find the x -intercept and y -intercept of a line

Words You Know

From the lists of "Words to Learn," choose the word or phrase that best completes each statement.

1. Two perpendicular number lines that meet at their zero points are called _____.
2. A(n) _____ can be drawn without lifting the pencil off the paper.
3. A region formed by a pair of axes is a(n) _____.
4. _____ are the two numbers used to locate a point on a coordinate plane.
5. The _____ is the set of points whose coordinates make an equation true.
6. An equation whose graph is a straight line is a(n) _____.
7. The point at which the x -axis and the y -axis meet at right angles is the _____.

More Practice

Refer to the bottom map on page 80. Find the number of blocks between each pair of coordinates.

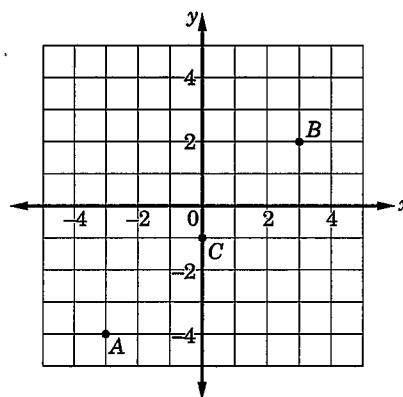
8. 8 west, 3 north and 8 west, 17 north _____
9. 4 east, 10 south and 11 west, 10 south _____

Name the coordinates of each point on the graph at the right.

10. A _____ 11. B _____ 12. C _____

On the graph, draw and label each point.

13. $D(-4, 1)$ 14. $E(1, -5)$ 15. $F(2, 0)$



Name the quadrant in which each point is located.

16. $(3, -2)$ _____ 17. $(-16, -19)$ _____

Find the distance between each pair of points.

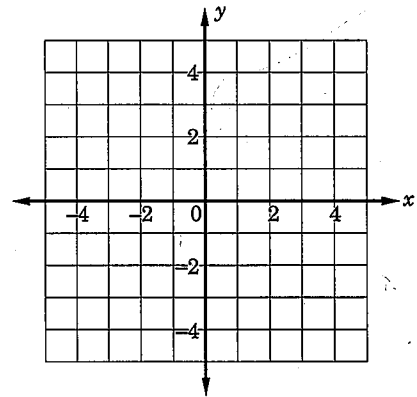
18. $(6, -8)$ and $(6, -1)$ _____ 19. $(-11, -6)$ and $(14, -6)$ _____

Use the equation $y = -3x + 5$. Find y for each given value of x .

20. $x = 2, y =$ _____ 21. $x = -4.5, y =$ _____

22. Complete the table of values for the equation $y = 2x - 2$. Then sketch the graph of the equation.

x	y	(x, y)
-1		
1		
3		



23. A vertical line passes through the point $(6, -1)$. What is the equation of the line? _____
24. Find the slope of the line passing through the points $(1, -3)$ and $(-1, 3)$. _____

Find the slope of the graph of each linear equation.

25. $y = 2x + 5$ _____ 26. $3x - 12y = 2$ _____

Find the x -intercept and the y -intercept of the graph of each equation.

27. $y = x - 6$ _____ 28. $4x - 7y = 28$ _____

Problems You Can Solve

29. If the slope of a ladder leaning against a wall is 4, and the base of the ladder is 3 feet from the wall, how far up the wall does the ladder reach? (Hint: Draw a diagram on graph paper to help.) _____
30. **For Your Portfolio** Here is the game of "Slopes and Intercepts." Each player draws a line on a set of coordinate axes on a sheet of graph paper. Then the player writes his or her name below the graph. On a separate sheet, the player notes the slope and the two intercepts of the line. Players place their graphs where everyone can see them. Players figure out the slopes and intercepts of all but their own graphs. When this is done, each player reads the slope and intercepts of his or her graph. Other players check their answers, giving themselves 1 point for each correct answer. Players lose 1 point if they incorrectly identify the slopes or intercepts. Play a few rounds with some classmates. On a separate sheet of paper, write a paragraph about what happens.