

LESSON

1.8

The Coordinate Plane

BEFORE

Now

WHY?

You used number lines.

You'll identify and plot points in a coordinate plane.

So you can compare the fuel economy of cars, as in Ex. 28.

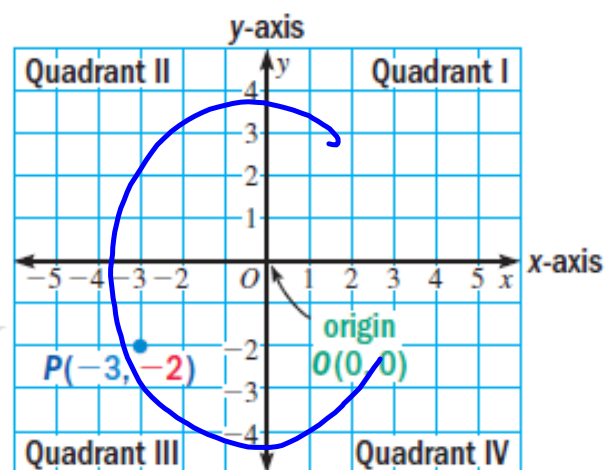
Vocabulary

coordinate plane,
p. 47

A **coordinate plane** is formed by the intersection of a horizontal number line called the **x-axis** and a vertical number line called the **y-axis**. The axes meet at a point called the **origin** and divide the coordinate plane into four **quadrants**.

Each point in a coordinate plane is represented by an **ordered pair**. The first number is the **x-coordinate**, and the second number is the **y-coordinate**.

Point P is represented by the ordered pair $(-3, -2)$.
Point P is in Quadrant III.



$(-3, -2)$

$(-3, -2)$

LESSON

1.8

Name _____ Date _____

Practice A

For use with pages 47-51

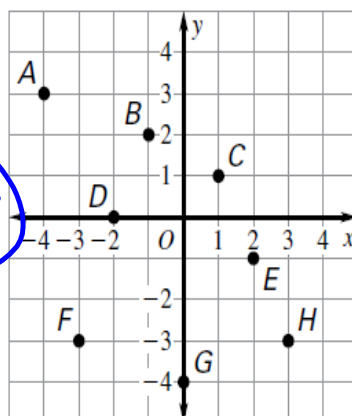
Give the coordinates of the point.

1. A $(-4, 3)$ 2. B

3. C 4. D

5. E $(2, -1)$ 6. F $(-3, -3)$

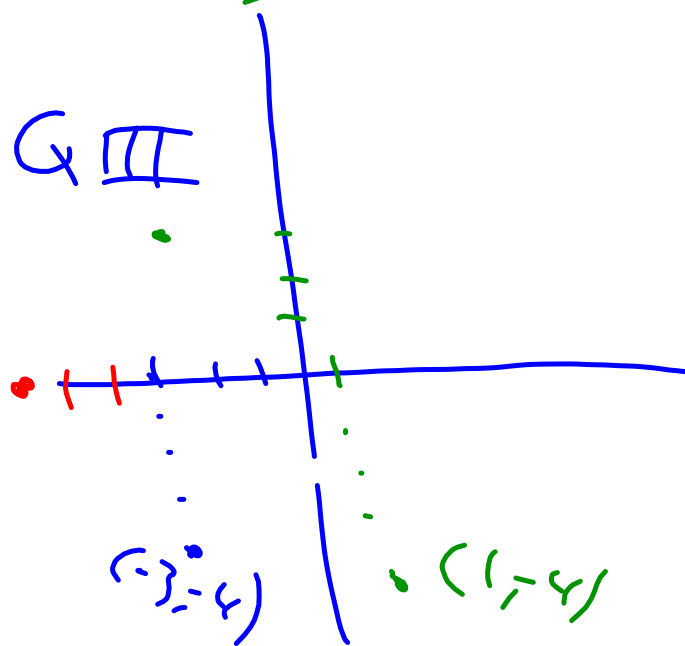
7. G 8. H



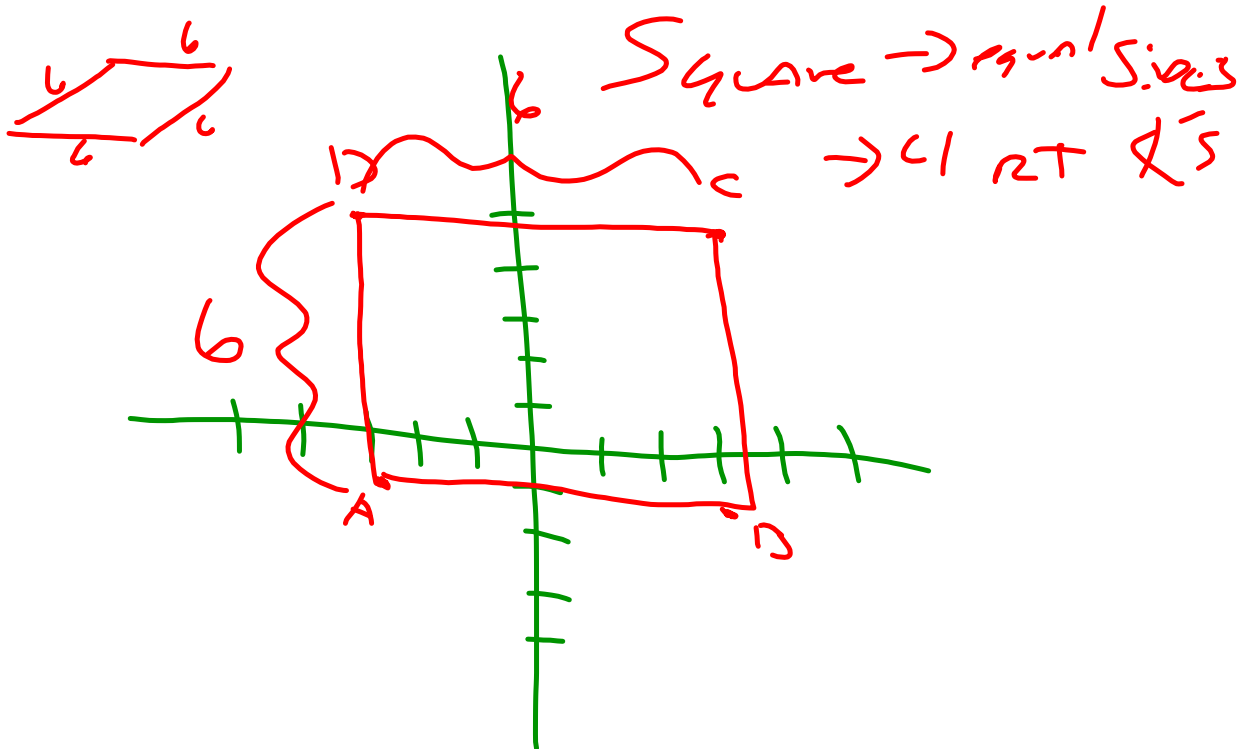
Plot the point in a coordinate plane. Describe the location of the point.

- | | | | |
|---------------|---------------|---------------|----------------|
| 9. $(-3, -4)$ | 10. $(1, -4)$ | Q IV | 11. $(5, -2)$ |
| 12. $(-6, 0)$ | on X axis | 13. $(4, -7)$ | 14. $(3, -5)$ |
| 15. $(-1, 4)$ | 16. $(-2, 3)$ | Q II | 17. $(-3, -5)$ |

9) Q3 or Q III



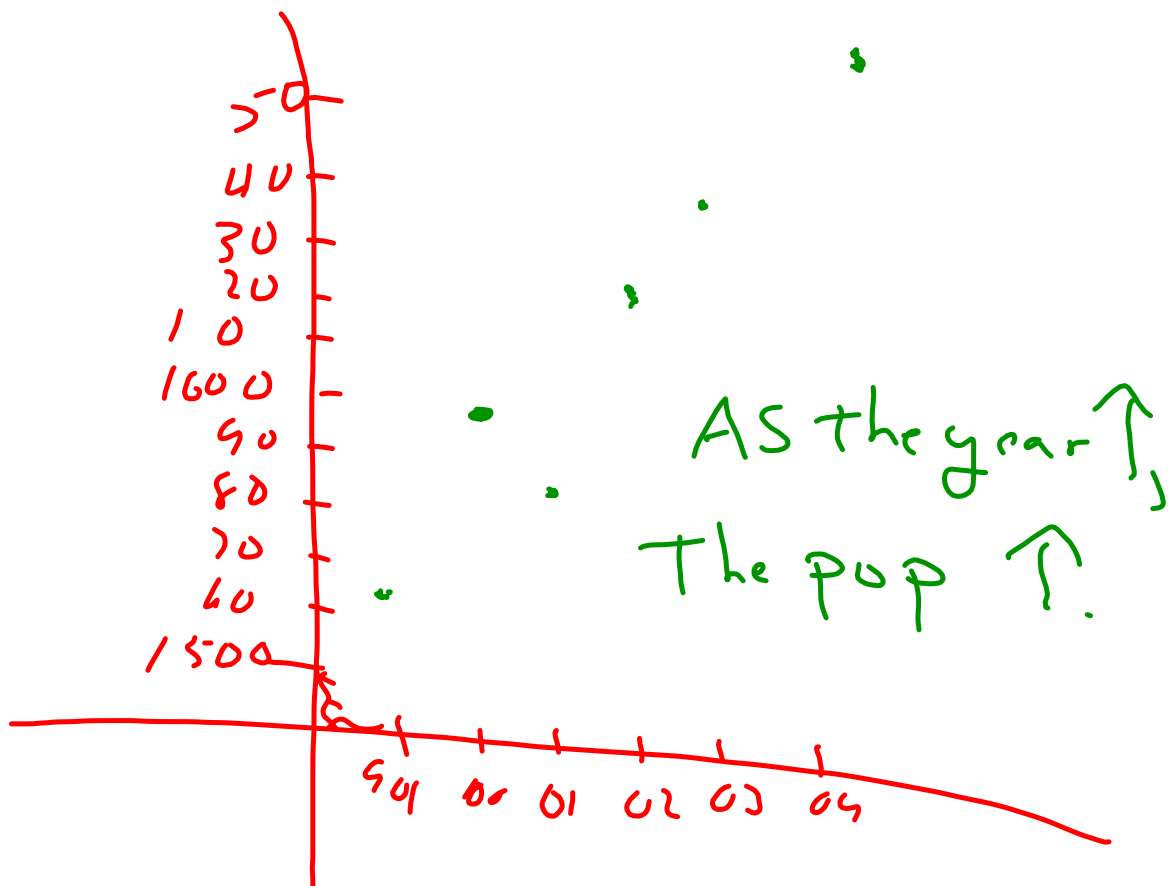
18. Use a coordinate plane. A B C D
- a. Plot the points $(-3, -1)$, $(3, -1)$, $(3, 5)$, and $(-3, 5)$. Connect the points in order. Connect the last point to the first point.
- b. Identify the figure. Explain your reasoning.



19. The table shows the attendance at a school's talent show from 1999 to 2004.

Year	1999	2000	2001	2002	2003	2004
Number of attendees	1564	1601	1589	1623	1635	1650

- a. Make a scatter plot of the data.
b. Describe any relationship you see.



20. The table shows the number of hours students spent studying for an exam and the score, as a percent, received on the exam.

Time spent studying (hours)	1	2	3	4	5	6	7
Exam score (percent)	58	60	72	85	91	96	94

- a. Make a scatter plot of the data.
b. Describe any relationship you see.

STUDY INCREASE,
THE SCORES INCREASE.

