LESSON 1.8

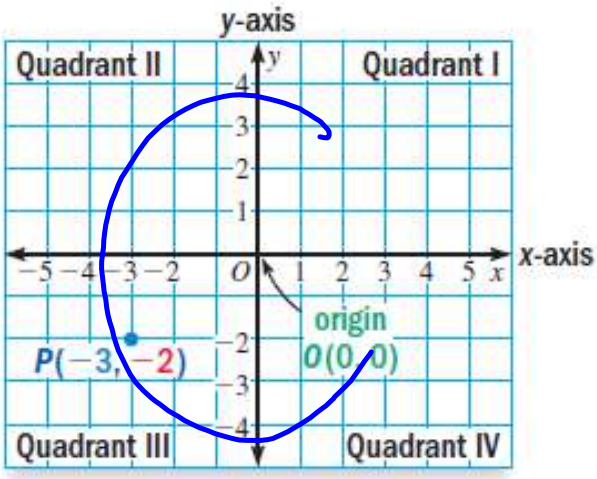
The Coordinate Plane

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)

LESSON 1.8

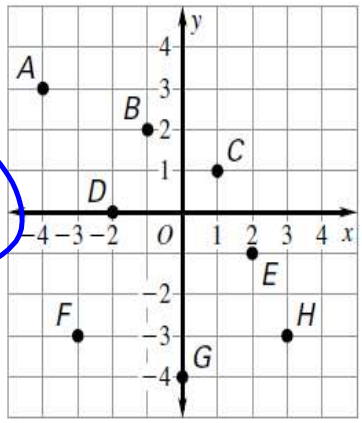
Name _____ Dat

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



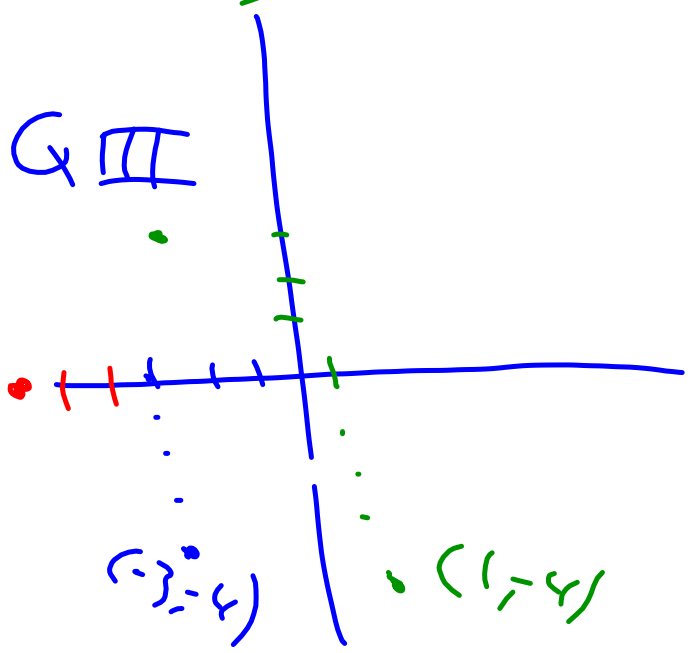
Plot the point in a coordinate plane. Describe the location of the point.

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.** $(-2, 3)$ QII **17.** $(-3, -5)$

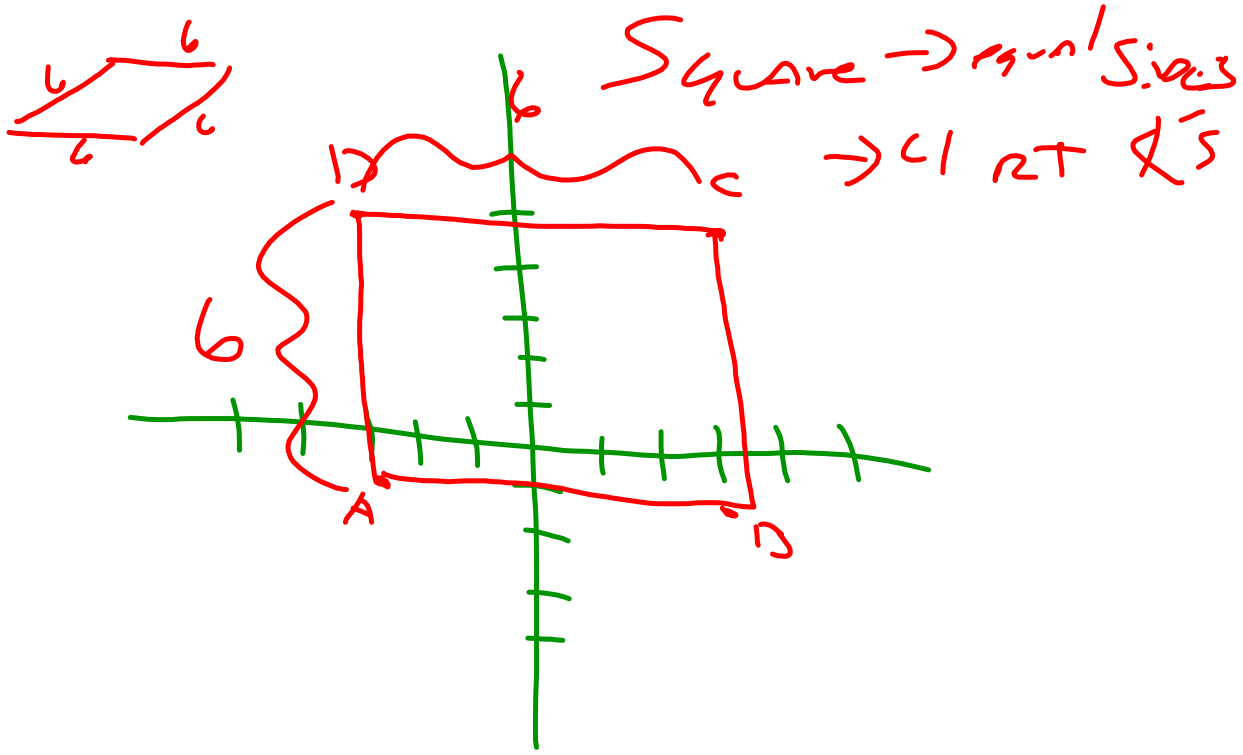
9) Q3 or QIII



18. Use a coordinate plane.

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.

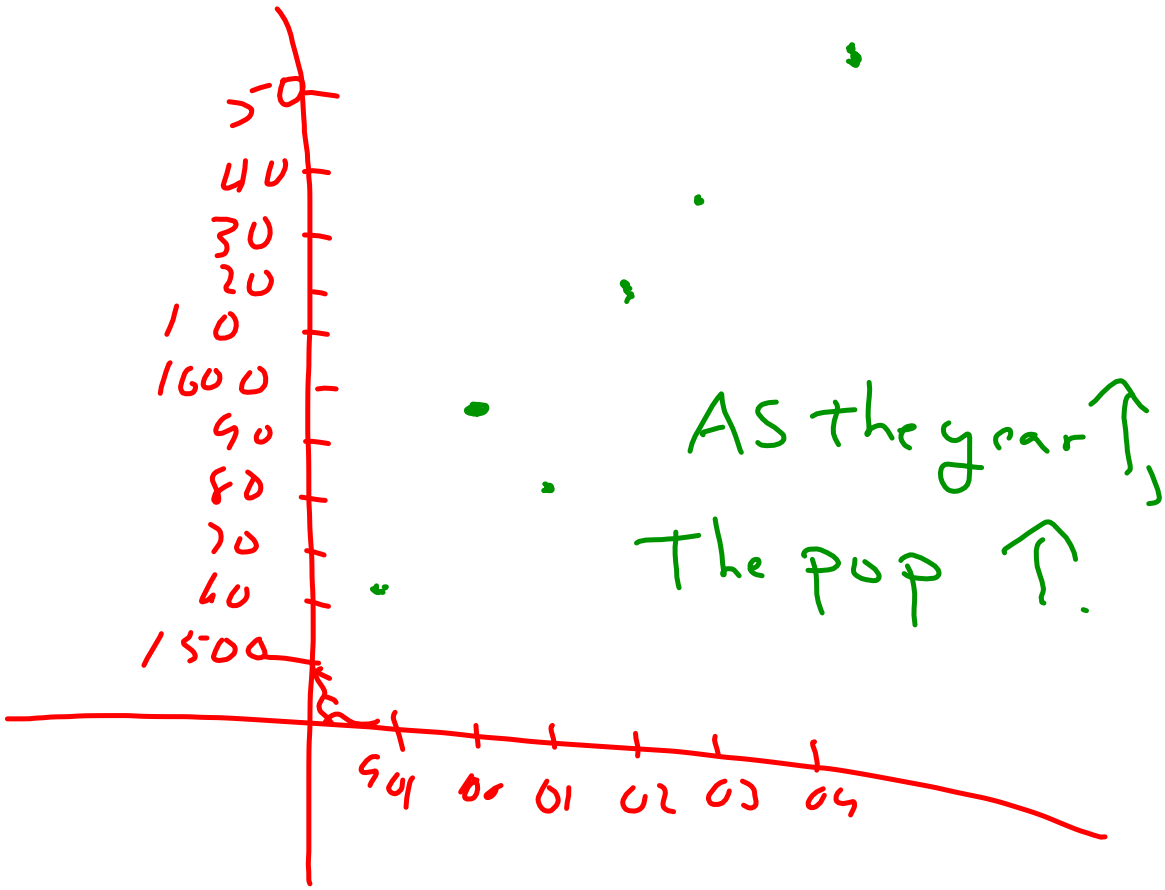


19. The table shows the attendance at a school's talent show from 1999 to 2004.

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.

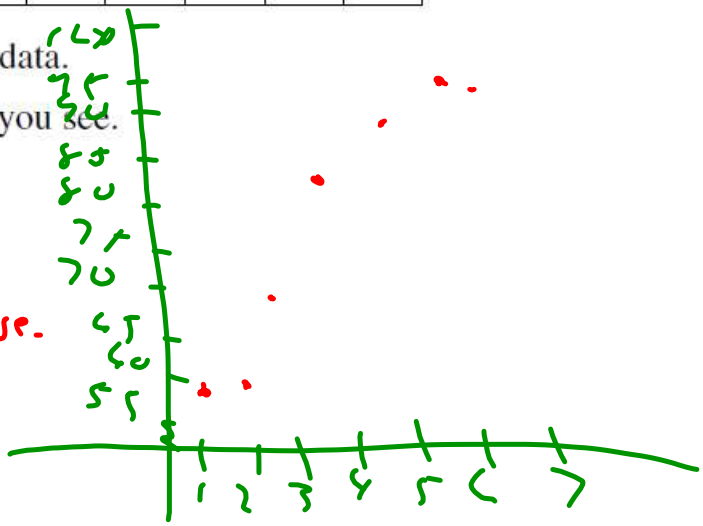


20. The table shows the number of hours students spent studying for an exam and the score, as a percent, received on the exam.

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 increases
To scores increase.