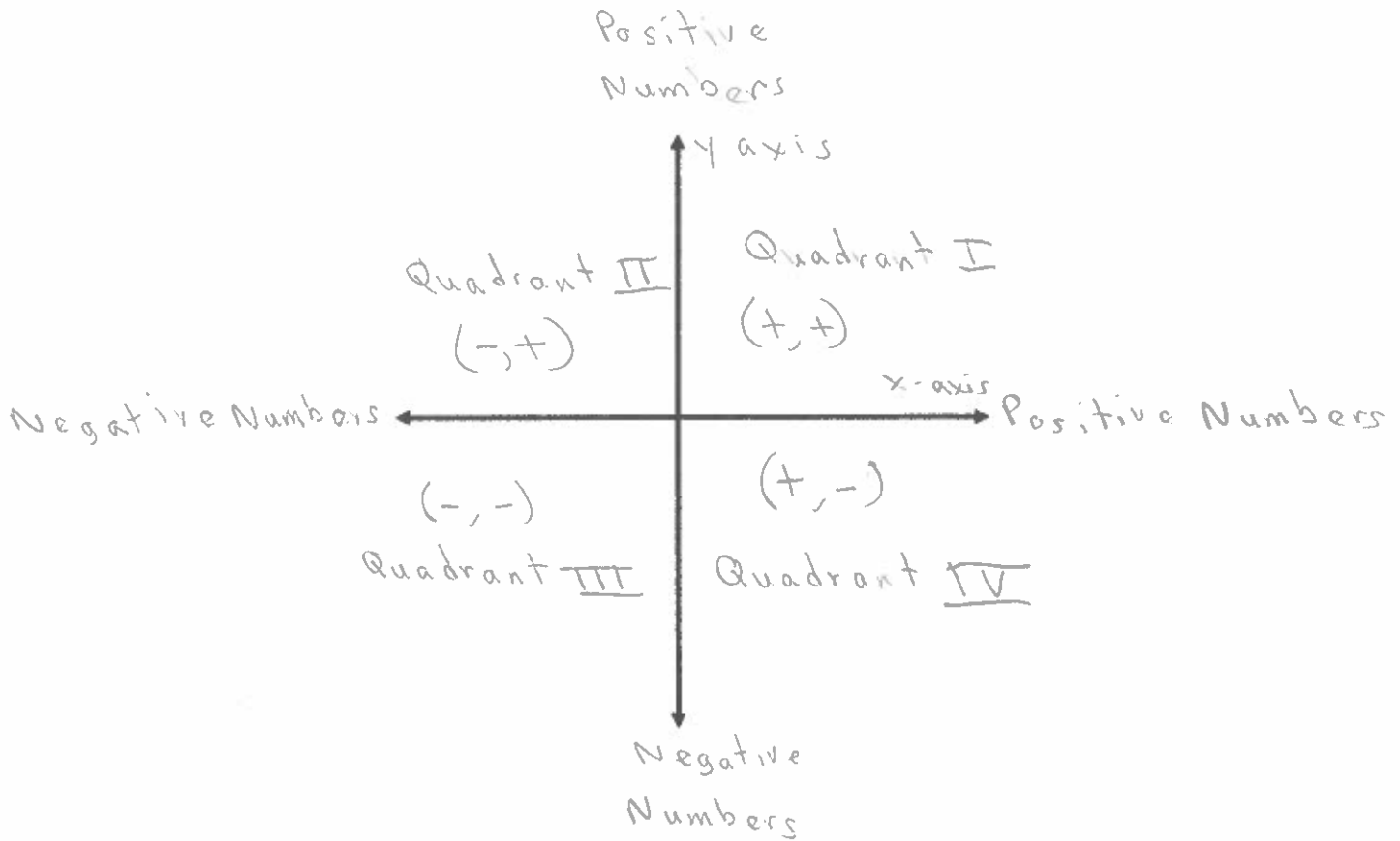


## 6.5 The Coordinate Plane

ESSENTIAL QUESTION:



An *ordered pair* is used to locate a point in a coordinate plane.

ordered pair:  $(4, -2)$

x-coordinate

y-coordinate

When plotting an ordered pair, you start at the origin. In an ordered pair, your x-coordinate (the first number) tells you whether to go to the left or the right. You go to the left for a negative number and you go to the right for a positive number. From there, your y-coordinate (the second number) tells you to go up or down. You go down for a negative number and you go up for a positive number. Then you plot a point for the ordered pair.

EXAMPLE 1->Identifying An Ordered Pair.

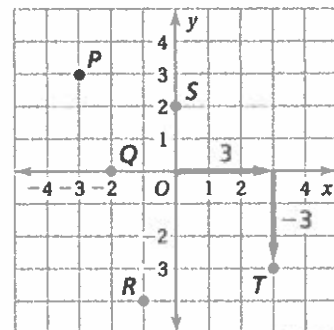
Which ordered pair corresponds to point *T*?

A  $(-3, -3)$

B  $(-3, 3)$

C  $(3, -3)$

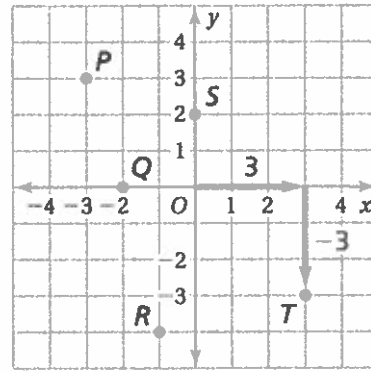
D  $(3, 3)$



**ON YOUR OWN**

Use the graph in Example 1 to write an ordered pair corresponding to the point.

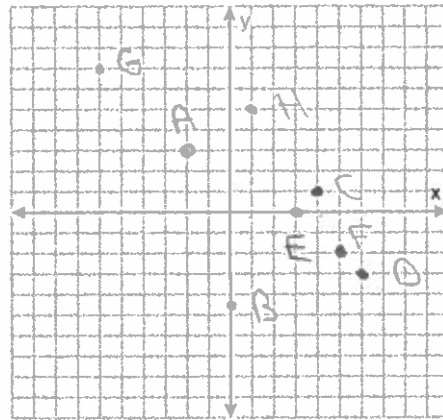
1. Point P  $(-3, 3)$
2. Point Q  $(-2, 0)$
3. Point R  $(-1, -4)$
4. Point S  $(0, 2)$



**EXAMPLE 2->Plotting Ordered Pairs**

Plot the ordered pairs in a Coordinate Plane

1. A (-2, 3)
2. B (0, -4.5)
3. C (4, 1)
4. D (6, -3)
5. E (3, 0)
6. F (5, -2)
7. G (-6, 7)
8. H (1, 5)



**ON YOUR OWN**

Plot the ordered pairs in a Coordinate Plane

1. A (3, -1)
2. B (-5, 0)
3. C (-2.5, -1)
4. D  $(-1\frac{1}{2}, \frac{1}{2})$

