

Study Guide

Integration: Algebra The Coordinate Plane

Every point in the coordinate plane can be denoted by an ordered pair consisting of two numbers. The first number is the **x-coordinate**, and the second number is the **y-coordinate**.

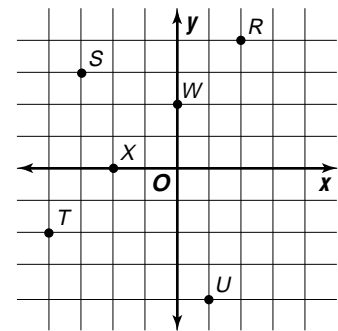
To determine the coordinates for a point, follow these steps.

1. Start at the origin and count the number of units to the right or left of the origin. The *positive direction* is to the right, and the *negative direction* is to the left.
2. Then count the number of units up or down. The positive direction is up, and the negative direction is down.

Note: If you do not move either right or left, the x-coordinate is 0. If you do not move up or down, the y-coordinate is 0.

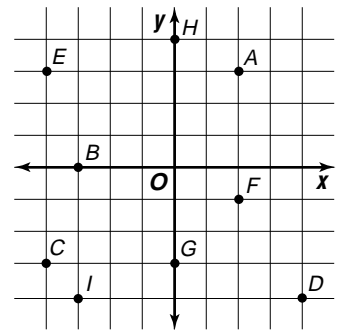
Example: Write the ordered pair for each point shown at the right.

- The ordered pair for R is $(2, 4)$.
 The ordered pair for S is $(-3, 3)$.
 The ordered pair for T is $(-4, -2)$.
 The ordered pair for U is $(1, -4)$.
 The ordered pair for W is $(0, 2)$.
 The ordered pair for X is $(-2, 0)$.



Write the ordered pair for each point shown at the right.

- | | | |
|------|------|------|
| 1. A | 2. B | 3. C |
| 4. D | 5. E | 6. F |
| 7. G | 8. H | 9. I |



Graph each point on the coordinate plane.

- | | |
|----------------|-----------------|
| 10. $M(6, 4)$ | 11. $N(-5, 4)$ |
| 12. $P(-3, 5)$ | 13. $Q(6, 0)$ |
| 14. $J(0, -4)$ | 15. $K(7, -5)$ |
| 16. $Y(9, -3)$ | 17. $Z(-8, -5)$ |

