

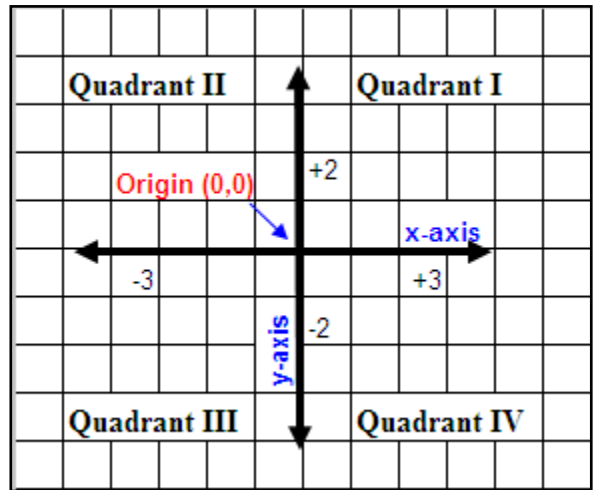
Reteaching Page

9.3 – The Coordinate Plane

You are used to working with ordered pairs in Quadrant I. Notice that **both** axes values are **positive** in Quadrant I.

Coordinate plane Vocabulary.

- **Axes** – the plural of axis.
- **Coordinates** – the ordered pair used to locate a point on the plane.
- **Origin** – the point where the axes intersect (0,0)
- **Quadrants** – $\frac{1}{4}$ of the plane.
 - Notice that the quadrants are labeled with Roman numerals and in a **counterclockwise** fashion!



Identifying the Quadrants.

- Quadrant I – The x-axis is positive. The y-axis is positive. The coordinates are $(+x, +y)$.
- Quadrant II – The x-axis is negative. The y-axis is positive. The coordinates are $(-x, +y)$.
- Quadrant III – The x-axis is negative. The y-axis is negative. The coordinates are $(-x, -y)$.
- Quadrant IV – The x-axis is positive. The y-axis is negative. The coordinates are $(+x, -y)$.

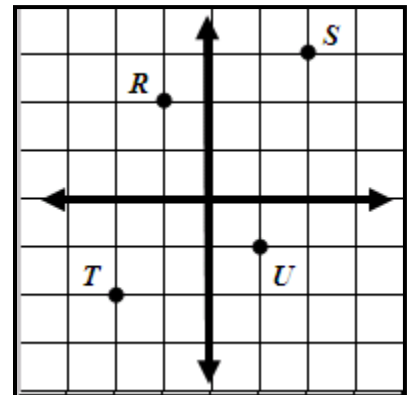
Name the quadrant where each point is located. Then identify the values of its coordinates.

R is in Quadrant ____ . The x-axis value is ____ . The y-axis value is ____ .

S is in Quadrant ____ . The x-axis value is ____ . The y-axis value is ____ .

T is in Quadrant ____ . The x-axis value is ____ . The y-axis value is ____ .

U is in Quadrant ____ . The x-axis value is ____ . The y-axis value is ____ .



Graphing coordinates on the plane.

1. Start with the x-axis value - If it is positive move right. If it is negative move left.
2. Finish with the y-axis value - If it is positive move up. If it is negative move down.

V = $(-2, -3)$ → find negative 2, then move down 3

W = $(3, -1)$ → find positive 3, then move down 1

X = $(-3, -3)$ → find negative 3, then move down 3

Y = $(-2, 1)$ → find negative 2, then move up 1

