

Course: Geometry
Unit: Lines and the Coordinate Plane
Section: The Coordinate Plane

Example: The Coordinate Plane

Problem:

The Coordinate Plane

Solution:

The coordinate plane is a grid.

To indicate a point's position horizontally, we use the x-axis. It is a number line running from left to right on the plane.

The y-axis is a vertical number line that is perpendicular to the x-axis.

The point where they meet is called the origin. The origin represents zero on both the x- and y- axes.

As you can see, the x- and y- axes divide the plane into four parts. These parts are called **quadrants**, and we use roman numerals to label them.

Quadrant one is the upper right portion of the plane. It is the region where the x- and y-values are both positive.

Quadrant two is the upper left portion of the plane. It is the region where the x-values are negative and the y-values are positive.

Quadrant three is the lower left portion of the plane. It is the region where the x- and y- values are both negative.

Quadrant four is the lower right portion of the plane. It is the region where the x-values are positive and the y-values are negative.