

Grade 6 Playlist: Drawing Polygons in the Coordinate Plane

Aligns with [CCSS.MATH.CONTENT.6.G.A.3](#): Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.

Related Standards

- [CCSS.MATH.CONTENT.5.G.A.1](#): Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
- [CCSS.MATH.CONTENT.8.G.B.8](#): Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

PREVIEW



Objectives

In this playlist, you will learn and practice the following skills:

- Draw polygons in the coordinate plane given the coordinates of the vertices.
- Find the length of a side of a polygon that joins points with the same x -coordinate or the same y -coordinate.

Let's get started!

Key Terms

- A **polygon** is a closed, two-dimensional figure with three or more sides.
- The **coordinate plane** is a coordinate system defined by perpendicular axes, x and y , that intersect at 0 on each line.
- A **vertex** is a point of intersection of two sides of a polygon.
- An **ordered pair** gives the coordinates of a point, with the x -coordinate as the first number and the y -coordinate as the second number.
- The **origin** is the point where the x - and y -axes intersect, and has the coordinates $(0, 0)$.
- The **absolute value** of a number is its distance from 0.

