



## Pythagorean Theorem in Coordinate Plane

### Today's Standard

8.G.B8 - Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

### Real-World Applications for this Standard

Finding the shortest path between two locations on a map; Determining the distance between two points on a graph in a science experiment; Calculating the diagonal distance of a rectangular field; Engineering applications, such as finding distances in construction plans; Designing video game levels with accurate distance measurements

### Today I Learned

Today we learned how to use the Pythagorean Theorem to find the distance between two points on a graph. This helps us understand how far apart things are in a coordinate plane.

### Common Stumbling Blocks

Sometimes kids think the Pythagorean Theorem only works with whole numbers, but it works with all numbers. They might also mix up the differences in coordinates with the actual distance.

### Quiz Me

- What do we use the Pythagorean Theorem for?
- Can the Pythagorean Theorem work with any numbers?
- What is a coordinate plane?
- What is the hypotenuse?
- How do we find the distance between two points?

### Help Me

The Pythagorean Theorem helps us find out how far apart two points are on a graph. We use this in real life to measure distances on maps and in different designs.