



Pythagorean Theorem Applications

Today's Standard

8.G.B7 - Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

Real-World Applications for this Standard

Finding the height of a tree using a shadow; Calculating the distance between two points on a coordinate plane; Determining the length of a diagonal in a rectangular prism; Designing a ramp for accessibility; Finding the shortest path in navigation

Today I Learned

Today, we learned about the Pythagorean Theorem. It helps us find the lengths of sides in right triangles.

Common Stumbling Blocks

Some kids think the Pythagorean Theorem works for all triangles, but it only works for right triangles. Others forget to square the side lengths or take the square root at the end.

Quiz Me

- What shape does the Pythagorean Theorem work with?
- What do you call the longest side of a right triangle?
- What is the formula for the Pythagorean Theorem?
- Can you use the theorem for a triangle without a right angle?
- What must you do to the side lengths in the formula?

Help Me

The Pythagorean Theorem helps us figure out how long the sides of a right triangle are. For example, we can use it to find out how far we have walked if we know the distance east and north we have traveled.