Equations of Circles

Today's Standard

HSG.GPE.A1 - Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.

Real-World Applications for this Standard

Designing round objects like wheels or clocks; Mapping out circular plots of land; Understanding satellite orbits; Creating graphic designs with circular patterns

Today I Learned

Today, we learned how to find the equation of a circle using math. We used something called the Pythagorean Theorem and another trick called completing the square.

Common Stumbling Blocks

Sometimes kids think that the equation of a circle looks like the equation of a line, but they are different. Another tricky part is completing the square, which is not the same as solving equations.

Quiz Me

- What shape are we learning about?
- What do we use to find the circle's equation?
- What is the center of a circle?
- What is the radius of a circle?
- What is completing the square?

Help Me

The equation of a circle helps us understand things like wheels, clocks, and even the paths that satellites take around Earth. It's like a special rule that tells us how circles work in math.