Square and Cube Roots in Equations

Today's Standard

8.EE.A2 - Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.

Real-World Applications for this Standard

Calculating the side length of a square given its area; Determining the edge length of a cube given its volume; Understanding the concept of irrational numbers in geometry; Using square roots in engineering to find diagonal lengths; Applying cube roots in physics to determine densities

Today I Learned

Today, we learned how to use square roots and cube roots to solve math problems. We also found out that some numbers can't be written as simple fractions, like the square root of 2.

Common Stumbling Blocks

Some kids might think all roots are fractions, but some aren't. Also, they might think square roots are always positive, but they can be negative too.

Quiz Me

- What is the square root of 9?
- What is the cube root of 8?
- Can the square root of 2 be written as a fraction?
- Is the square root of 16 always positive?
- What does the cube root of 27 equal?

Help Me

Square roots and cube roots help us solve problems. For example, if you know the area of a square, you can find the side length with a square root. These skills are used in many real-world situations.