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.

Cues	Notes
Square root Cube root Rational number Irrational number $x^2 = p$ $x^3 = p$	Square roots are used to find a number which, when multiplied by itself, gives the original number. Cube roots are used to find a number which, when multiplied by itself three times, gives the original number. Rational numbers can be expressed as fractions. Irrational numbers cannot be expressed as fractions and have non-repeating, non-terminating decimal expansions. Equations of the form $x^2 = p$ can be solved using square roots. Equations of the form $x^3 = p$ can be solved using cube roots.

Summary

This standard involves using square and cube roots to solve equations, understanding the difference between rational and irrational numbers, and applying this knowledge to real-world problems.