Solving Equations Using Square and Cube Roots

Notes	Video Links & Practice Space
Vocabulary 1. **Cube Root:** a factor of a number that, when _____ by itself _____ times, equals the original number 2. **Real Numbers:** the set of all _____ and _____ numbers 3. **Square Root:** a factor of a number that, when _____ by itself, equals the original number	**Vocab (0:45)**
Solving Equations using Square Root Whenever you are going to find the inverse of an exponent, you are going to take the _____. $x^2 = 36$ ***Remember!** - The product of two negative numbers is a _____ number* If the number is a _____ number, such as 36 in our above example, the equation will always have _____ real number solutions.	**Square Root (1:20)**

Solving Equations using Cube Root $x^3 = 8$ Cube root solutions _____ from square root solutions. A positive number cubed and a negative number cubed do _____ equal the same value. Equations with a cube root will result in _____ solution.	**Cube Root (1:14)**
Practice Problems 1 $x^3 = -343$ $x^2 = 144$	**Practice 1 (2:22)**
Practice Problems 2 $x^2 = 81$ $x^3 = 1$	**Practice 2 (2:01)**