

Square Roots & Cube Roots

Unit 1 - Day 3

Parts of Roots

\sqrt{x}

← Radical

← Base

$y \cdot y = x$
 $y^2 = x$

$\sqrt{144}$
 $12 \cdot 12 = 144$
12

What does this look like mathematically?

Perfect Squares

$\sqrt[3]{1} = 1$ $1^3 = 1$

$\sqrt[3]{8} = 2$ $2^3 = 8$

$\sqrt[3]{27} = 3$

$\sqrt[3]{64} = 4$

$\sqrt[3]{125} = 5$ $5^3 = 125$

Perfect Squares

$1^2 = 1$

$2^2 = 4$

$3^2 = 9$

$4^2 = 16$

$5^2 = 25$

$6^2 = 36$

$7^2 = 49$

$8^2 = 64$

...

How do we solve questions with these operations?

~~$\sqrt{x^2} = 36$~~
 $x = 6$

~~$\sqrt{x^2} = 4$~~
 $x = 2$

~~$\sqrt{x^2} = 169$~~
 $x = 13$