

Cube Root Notes

A cube root of a number is one of its three equal factors, which means if $x^3 = y$, then x is the cube root of y .

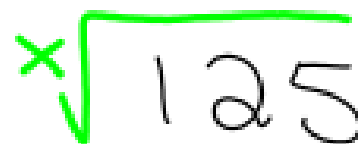
Symbol $\sqrt[3]{}$

Every integer has exactly one cube root.

- the cube root of a positive number is positive.
- the cube root of zero is zero.
- the cube root of a negative number is negative.

Calculator Button for Cube Roots

- 2nd function above $^{\wedge}$ sign



A hand-drawn green cube root symbol, consisting of a vertical line with a horizontal bar at the top and a small 'x' at the bottom left. The number 125 is written inside the symbol.

To find the cube root of 125, enter 3, then 2nd function cube root button, then 125, then enter (equals)

Perfect cubes are the cubes of integers. Below is the list of the first 15 perfect cubes

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

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

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

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

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

$$\sqrt[3]{216} = 6$$

$$\sqrt[3]{343} = 7$$

$$\sqrt[3]{512} = 8$$

$$\sqrt[3]{729} = 9$$

$$\sqrt[3]{1000} = 10$$

$$\sqrt[3]{1331} = 11$$

$$\sqrt[3]{1728} = 12$$

$$\sqrt[3]{2197} = 13$$

$$\sqrt[3]{2744} = 14$$

$$\sqrt[3]{3375} = 15$$

Find the cube root of each.

$$1) \sqrt[3]{729} = 9$$

$$3) \sqrt[3]{9261} = 21$$

$$2) \sqrt[3]{-512} = -8$$

$$4) \sqrt[3]{-5832} = -18$$

Estimate the cube root to the nearest integer. NO CALCULATORS.

$$5) \sqrt[3]{-2024}$$

Between -12 and -13

closer to -13