

Rule 1: $\left(\sqrt[n]{a}\right)^n = \sqrt[n]{a^n} = a$

Rule 2: $\sqrt[n]{ab} = \sqrt[n]{a} \sqrt[n]{b}$

Rule 3: $\sqrt[n]{\frac{a}{b}} = \frac{\left(\sqrt[n]{a}\right)}{\left(\sqrt[n]{b}\right)}$

Rule 4: $\sqrt[n]{-a} = -\sqrt[n]{a}$, when n is odd.

Examples: $\sqrt{10^2} = 10$

$$\left(\sqrt[3]{26}\right)^3 = 26$$

$$\sqrt{27} = \sqrt{9 \cdot 3} = \sqrt{9} \sqrt{3} = 3\sqrt{3}$$

$$\sqrt[3]{-54} = \sqrt[3]{(-27)(2)} = \left(\sqrt[3]{-27}\right) \left(\sqrt[3]{2}\right) = -3 \sqrt[3]{2}$$