

Higher Roots

Sometimes, the index is higher than 3.

What number times itself four times is 16?

$$\sqrt[4]{16}$$

Use the chart to find:

$$\sqrt[5]{1024}$$

$$\sqrt[4]{625}$$

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

Root & Power Chart

$\sqrt[n]{x} = b$	b=2	b=3	b=4	b=5	b=6	b=7	b=8	b=9	b=10	b=11	b=12	b=13	b=14	b=15
n=2	x=4	9	16	25	36	49	64	81	100	121	144	169	196	225
n=3	8	27	64	125	216				1000					
n=4	16	81	256	625					10000					
n=5	32	243	1024											

TRY:

$$\sqrt[5]{-1024}$$

$$\sqrt[4]{-81}$$

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

$$-\sqrt[4]{16}$$

$$\sqrt[4]{-16}$$