

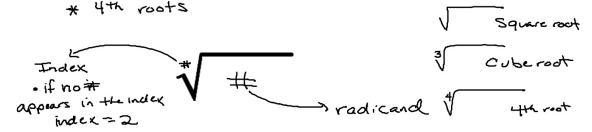
DO NOW

List the first 13 perfect squares.

1 4 9 16
 25 36 49 64
 81 100 121 144
 169 196 225

Radicals and the Calculator

radical - Square roots
 * cube roots
 * 4th roots



inverse operations -

addition and subtraction
 multiplication and division
 Squaring and Square root

square roots and signs:

principal root - positive root

$$\begin{aligned}
 +\sqrt{4} &= 2 & \pm\sqrt{4} &= \pm 2 \\
 -\sqrt{4} &= -2 & \sqrt{4} &= 2
 \end{aligned}$$

Using your calculator:

Square root $\rightarrow \sqrt{\quad}$
 $\boxed{\text{ctrl}} \boxed{x^{\frac{1}{2}}} \text{ Radicand } \boxed{\text{Enter}}$
 Cube root or 4th root ...
 $\boxed{\text{ctrl}} \boxed{\sqrt[4]{\quad}} \text{ Index } \boxed{\rightarrow} \text{ Radicand } \boxed{\text{Enter}}$

$$\sqrt{676} = 26$$

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

$$\sqrt[4]{16} = 2$$

$$\begin{aligned}
 (\sqrt{9})^2 \\
 9
 \end{aligned}$$

$$\begin{aligned}
 (\sqrt{16})^2 \\
 16
 \end{aligned}$$

$$\begin{aligned}
 (\sqrt{7})^2 \\
 7
 \end{aligned}$$

$$\begin{aligned}
 (\sqrt{17})^2 \\
 17
 \end{aligned}$$

$$\begin{aligned}
 \sqrt{(37)^2} \\
 37
 \end{aligned}$$

$$\begin{aligned}
 \sqrt{(210)^2} \\
 210
 \end{aligned}$$

HOMEWORK

Worksheet - HW Radicals
and the Calculator