

Warm-Up

$-\frac{2}{3}$ $\sqrt{4}$ $\sqrt{9}$ $\sqrt{25}$

	N	W	I	Q	\bar{Q}	R
$\sqrt{7}$					✓	✓
$\frac{21}{3}$	✓	✓	✓	✓		✓
$\frac{3}{5}$				✓		✓
$\sqrt[3]{-\frac{8}{27}}$				✓		✓
π					✓	✓
$-1.\bar{8}$				✓		✓

1- Passwords

2- Info Sheets

3- Media Coverage

4- Others



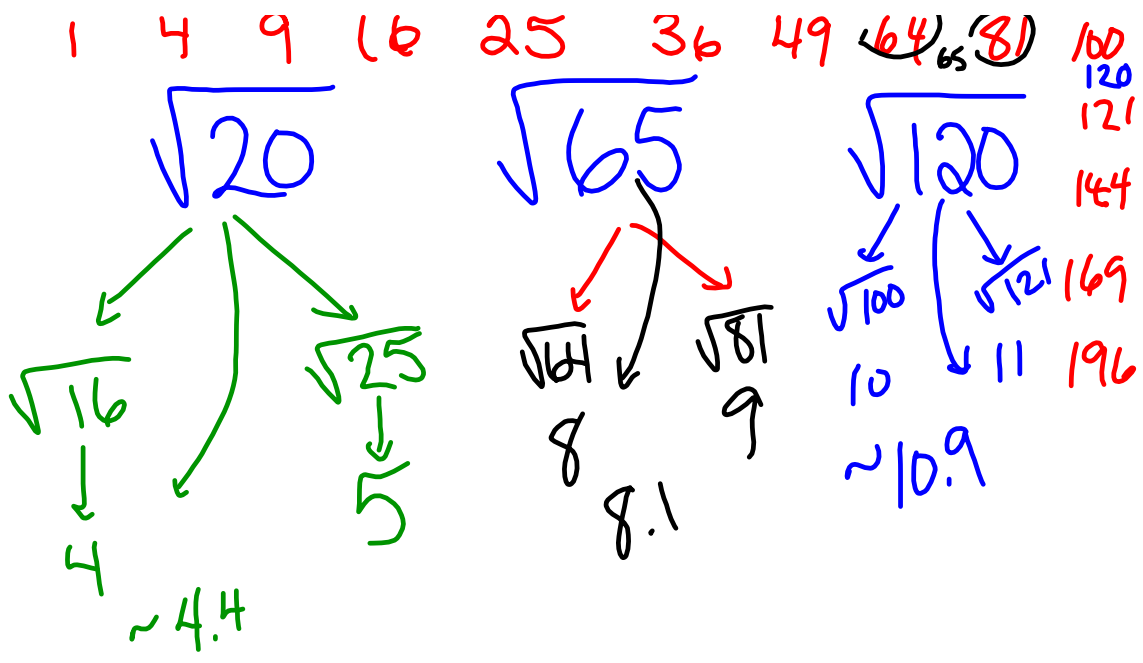
TRY THIS

Determine the value of each radical.

Radical	Value	Is the Value Exact or Approximate?
$\sqrt{16}$	4	Exact
$\sqrt{27}$	5.1962	Approximate
$\sqrt{\frac{16}{81}}$	$\frac{4}{9}$ or $0.\bar{4}$	Exact
$\sqrt{0.64}$	0.8	Exact
$\sqrt[3]{16}$	2.3	Approximate
$\sqrt[3]{27}$	3	Exact
$\sqrt[3]{\frac{16}{18}}$		App.

$1^3 = 1$
 $2^3 = 8$
 $3^3 = 27$
 $\sqrt[3]{8} = 2$
 $\sqrt[3]{27} = 3$

4.1 Math Lab: Estimating Roots



1 8₂₀ 27₃₆ 64 125 216

$$\begin{array}{c} \sqrt[3]{20} \\ \swarrow \quad \searrow \\ \sqrt[3]{8} \quad \sqrt[3]{27} \\ 2 \quad 3 \\ \sim 2.7 \end{array}$$

$$\begin{array}{c} \sqrt[3]{36} \\ \swarrow \quad \searrow \\ \sqrt[3]{27} \quad \sqrt[3]{64} \\ 3 \quad 4 \\ -3.3 \end{array}$$

EXAMPLE:

Order the following radicals from least to greatest.

$$\sqrt[3]{13}, \sqrt{18}, \sqrt[3]{9}, \sqrt[4]{27}, \sqrt[3]{-5}$$

$$\sqrt[3]{-5},$$