Simplify each.

$$=736.5$$

Perfect Squares:

81 100...



This symbol is called a radical it indicates finding a root.

The number in this spot is called the Index.

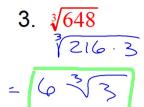
It tells what root you are to find.

If there is no index it means Square Root.

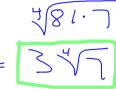


This quantity is called the Radicand

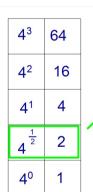
Simplify each.



Perfect Cubes: 8, 27, 64, 125, 216, 343,...



Perfect 4th powers: 16, 81, 256, 625, ...



$$a^{\frac{1}{n}} = \sqrt[n]{a}$$
 "the nth root of a"

Rational Exponents represent radicals (roots)

 $a^{\frac{m}{n}} = \sqrt[n]{a^m} \quad or \quad (\sqrt[n]{a})^m$

Write in radical form. This is Radical Form: $\sqrt{g^5}$

1.
$$W^{\frac{1}{5}}$$



2.
$$B^{-\frac{4}{3}} = \frac{1}{13}$$

There are several other ways to write this answer, this is one of the more common ways.

Write in exponential form:

This is Exponential Form:
$$a^{\frac{6}{7}}$$

$$\mathbf{C}. \quad \sqrt{B^7}$$

$$= \mathbb{B}^{\frac{1}{2}}$$

3.
$$C^{\frac{2}{9}}$$



4.
$$P^{2.8} = P^{\frac{2.8}{15}} - P^{\frac{14}{5}}$$