

Def. of $a^{\frac{m}{n}}$

Radicals

$$\sqrt{a^3} = (\sqrt{a})^3$$

$$\sqrt[3]{a^5} = (\sqrt[3]{a})^5$$

$$\sqrt[7]{a^2} = (\sqrt[7]{a})^2$$

$$\sqrt{a^9} = (\sqrt{a})^9$$

$$\sqrt[4]{a^3} = (\sqrt[4]{a})^3$$

Rational Exponents

$$a^{\frac{3}{2}}$$

base Exponent
 index

$$a^{\frac{5}{3}}$$

$$a^{\frac{2}{7}}$$

$$a^{\frac{9}{2}}$$

$$a^{\frac{3}{4}}$$