

5/13/13

9.6 - Fractional Exp. & Radicals

the "square root of x " is either $\sqrt[2]{x}$ or $x^{\frac{1}{2}}$
the "cube root of x " is either $\sqrt[3]{x}$ or $x^{\frac{1}{3}}$

$$\textcircled{\text{ex}} \quad \sqrt[4]{z^3} = z^{\frac{3}{4}}$$

$$\sqrt[4]{9^9} = 9^{\frac{9}{4}} = 9^{\frac{3}{2}}$$

$$r^{\frac{4}{5}} = \sqrt[5]{r^4} = (\sqrt[5]{r})^4$$

$$v^{\frac{2}{3}} = \sqrt[3]{v^2} = (\sqrt[3]{v})^2$$

$$\sqrt[2]{x^3} = x^{\frac{3}{2}}$$