

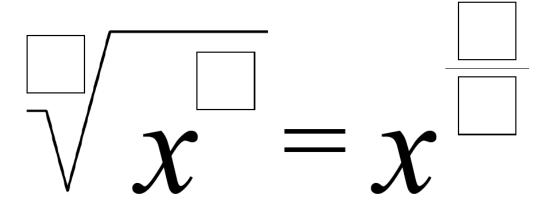
A rational exponent is _____

You can write each *n*th root using a rational exponent. If n is an integer greater than 1, then

Write each radical as a power.

1. ∛7 2. $\sqrt[5]{x}$ 3. \sqrt{y} Write each power as a radical. 1. $8^{\frac{1}{4}}$ 3. $m^{\frac{1}{7}}$ 2. $z^{\frac{1}{6}}$

Converting between Radical Form and Rational Exponent Form



Think "EOI" - Exponent over Index"

Write each expression in <u>radical form</u>. Show your work and simplify your answer, if possible.

1. $4^{\frac{3}{2}}$ 2. $5^{\frac{3}{4}}$ 3. $x^{\frac{4}{5}}$ 4. $y^{\frac{2}{3}}$

Write each expression in <u>rational exponent form</u>. Show your work and simplify your answer, if possible.

1. $(\sqrt[4]{2})^3$ 2. $(\sqrt{5})^4$ 3. $(\sqrt[5]{x})^8$ 4. $(\sqrt[5]{y})^{10}$