Rewrite With Fractional Exponents

Rewrite with fractional exponent:

$$\sqrt[3]{a}$$

Rewrite with fractional exponent:

$$\sqrt[3]{a} = a^{\frac{1}{3}}$$

Rewrite with fractional exponent:

$$\sqrt[5]{x}$$

Rewrite with fractional exponent:

$$\sqrt[5]{x} = x^{\frac{1}{5}}$$

Rewrite with fractional exponent:

$$\sqrt[4]{xy}$$

Rewrite with fractional exponent:

$$\sqrt[4]{xy} = (xy)^{\frac{1}{4}}$$

Note: The exponent only raises the variable or number directly in front of it.

Rewrite with fractional exponent:

$$\sqrt[5]{2x}$$

Rewrite with fractional exponent:

$$\sqrt[5]{2x} = (2x)^{\frac{1}{5}}$$

Rewrite with fractional exponent:

$$\sqrt{5a}$$

Rewrite with fractional exponent:

$$\sqrt{5a} = (5a)^{\frac{1}{2}}$$

Rewrite with fractional exponent:

$$5\sqrt{x}$$

Rewrite with fractional exponent:

$$5\sqrt{x} = 5x^{\frac{1}{2}}$$

Note: only the x is raised to the ½ power

Rewrite with fractional exponent:

$$8\sqrt[3]{x}$$

Rewrite with fractional exponent:

$$8\sqrt[3]{x} = 8x^{\frac{1}{3}}$$

Rewrite with fractional exponent:

$$\sqrt[3]{8x}$$

Rewrite with fractional exponent:

$$\sqrt[3]{8x} = (8x)^{\frac{1}{3}} = 2x^{\frac{1}{3}}$$

Rewrite with fractional exponent:

$$\frac{1}{2}\sqrt[5]{x}$$

Rewrite with fractional exponent:

$$\frac{1}{2}\sqrt[5]{x} = \frac{1}{2}x^{\frac{1}{5}}$$

Rewrite with fractional exponent:

$$\sqrt[6]{\frac{2}{3}x}$$

Rewrite with fractional exponent:

$$\sqrt[6]{\frac{2}{3}x} = \left(\frac{2}{3}x\right)^{\frac{1}{6}}$$

Rewrite with fractional exponent:

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

Rewrite with fractional exponent:

$$\sqrt[3]{x^2} = (x^2)^{\frac{1}{3}} = x^{\frac{2}{3}}$$

Rewrite with fractional exponent:

$$\sqrt[5]{x^4}$$

Rewrite with fractional exponent:

$$\sqrt[5]{x^4} = (x^4)^{\frac{1}{5}} = x^{\frac{4}{5}}$$

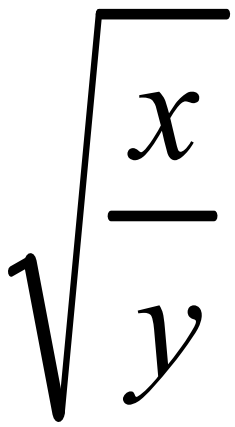
Rewrite with fractional exponent:

$$\sqrt[6]{x^4}$$

Rewrite with fractional exponent:

$$\sqrt[6]{x^4} = (x^4)^{\frac{1}{6}} = x^{\frac{4}{6}} = x^{\frac{2}{3}}$$

Rewrite with fractional exponent:



Rewrite with fractional exponent:

$$\sqrt{\frac{x}{y}} = \left(\frac{x}{y}\right)^{\frac{1}{2}}$$

Rewrite with fractional exponent:

$$\sqrt[3]{\frac{1}{2}}$$

Rewrite with fractional exponent:

$$\sqrt[3]{\frac{1}{2}} = \left(\frac{1}{2}\right)^{\frac{1}{3}}$$

Rewrite In Radical Form

Rewrite in radical form:

$$x^{\frac{1}{3}}$$

Rewrite in radical form:

$$x^{\frac{1}{3}} = \sqrt[3]{x}$$

Rewrite in radical form:

$$x^{\frac{2}{5}}$$

Rewrite in radical form:

$$x^{\frac{2}{5}} = \sqrt[5]{x^2}$$

Rewrite in radical form:

$$a^{\frac{1}{5}}$$

Rewrite in radical form:

$$a^{\frac{1}{5}} = \sqrt[5]{a}$$

Rewrite in radical form:

$$a^{\frac{1}{2}}$$

Rewrite in radical form:

$$a^{\frac{1}{2}} = \sqrt{a}$$

Rewrite in radical form:

$$a^{\frac{6}{7}}$$

Rewrite in radical form:

$$a^{\frac{6}{7}} = \sqrt[7]{a^6}$$

Rewrite in radical form:

$$(2x)^{\frac{1}{2}}$$

Rewrite in radical form:

$$(2x)^{\frac{1}{2}} = \sqrt{2x}$$

Rewrite in radical form:

$$2x^{\frac{1}{2}}$$

Rewrite in radical form:

$$2x^{\frac{1}{2}} = 2\sqrt{x}$$

Note: The exponent only raises the variable or number directly in front of it.

Rewrite in radical form:

$$(5x)^{\frac{2}{3}}$$

Rewrite in radical form:

$$(5x)^{\frac{2}{3}} = \sqrt[3]{(5x)^2} = \sqrt[3]{25x^2}$$

Rewrite in radical form:

$$5x^{\frac{2}{3}}$$

Rewrite in radical form:

$$5x^{\frac{2}{3}} = 5\sqrt[3]{x^2}$$

Rewrite in radical form:

$$\frac{1}{2}x^{\frac{2}{5}}$$

Rewrite in radical form:

$$\frac{1}{2}x^{\frac{2}{5}} = \frac{1}{2}\sqrt[5]{x^2}$$

Rewrite in radical form:

$$\left(\frac{x}{y}\right)^{\frac{1}{2}}$$

Rewrite in radical form:

$$\left(\frac{x}{y}\right)^{\frac{1}{2}} = \frac{\sqrt{x}}{\sqrt{y}} \bullet \frac{\sqrt{y}}{\sqrt{y}} = \frac{\sqrt{xy}}{y}$$

Simplify
WITHOUT
a Calculator:

Simplify WITHOUT a calculator:

$$8^{\frac{1}{3}}$$

Simplify WITHOUT a calculator:

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

Simplify WITHOUT a calculator:

$$16^{\frac{1}{2}}$$

Simplify WITHOUT a calculator:

$$16^{\frac{1}{2}} = 4$$

Simplify WITHOUT a calculator:

$$(-8)^{\frac{1}{3}}$$

Simplify WITHOUT a calculator:

$$(-8)^{\frac{1}{3}} = -2$$

Simplify WITHOUT a calculator:

$$25^{\frac{1}{2}}$$

Simplify WITHOUT a calculator:

$$25^{\frac{1}{2}} = 5$$

Simplify WITHOUT a calculator:

$$27^{\frac{1}{3}}$$

Simplify WITHOUT a calculator:

$$27^{\frac{1}{3}} = 3$$

Simplify WITHOUT a calculator:

$$-4^{\frac{1}{2}}$$

Simplify WITHOUT a calculator:

$$-4^{\frac{1}{2}} = -2$$

Simplify WITHOUT a calculator:

$$(-4)^{\frac{1}{2}}$$

Simplify WITHOUT a calculator:

$$(-4)^{\frac{1}{2}} = 2i$$

Simplify WITHOUT a calculator:

$$8^{\frac{2}{3}}$$

Simplify WITHOUT a calculator:

$$8^{\frac{2}{3}} = \sqrt[3]{8}^{2} = 4$$

Simplify WITHOUT a calculator:

$$16^{\frac{1}{4}}$$

Simplify WITHOUT a calculator:

$$16^{\frac{1}{4}} = 2$$

Simplify WITHOUT a calculator:

$$16^{\frac{3}{4}}$$

Simplify WITHOUT a calculator:

$$16^{\frac{3}{4}} = 8$$

Simplify WITHOUT a calculator:

$$27^{\frac{2}{3}}$$

Simplify WITHOUT a calculator:

$$27^{\frac{2}{3}} = 9$$

Simplify WITHOUT a calculator:

$$2(8)^{\frac{1}{3}}$$

Simplify WITHOUT a calculator:

$$2(8)^{\frac{1}{3}} = 4$$

Simplify WITHOUT a calculator:

$$5(36)^{\frac{1}{2}}$$

Simplify WITHOUT a calculator:

$$5(36)^{\frac{1}{2}} = 30$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(1) =$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(1) = 2(1) + (1)^{\frac{1}{2}} = 3$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(16) =$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(16) = 2(16) + 16^{\frac{1}{2}} = 36$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(4) =$$

Evaluate WITHOUT a calculator:

$$f(x) = 2x + x^{\frac{1}{2}}$$

$$f(4) = 2(4) + (4)^{\frac{1}{2}} = 10$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(8) =$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(8) = 2(8)^{\frac{1}{3}} - 8 = -4$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(-8) =$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(-8) = 2(-8)^{\frac{1}{3}} - (-8) = 4$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(1) =$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(1) = 2(1)^{\frac{1}{3}} - 1 = 1$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(-1) =$$

Evaluate WITHOUT a calculator:

$$g(x) = 2x^{\frac{1}{3}} - x$$

$$g(-1) = 2(-1)^{\frac{1}{3}} - (-1) = -1$$

Simplify:

$$x^{\frac{1}{2}} \cdot x^{\frac{1}{2}}$$

Simplify:

$$x^{\frac{1}{2}} \cdot x^{\frac{1}{2}} = x$$

Simplify:

$$2x^{\frac{3}{4}} \cdot 3x^{\frac{5}{4}}$$

Simplify:

$$2x^{\frac{3}{4}} \cdot 3x^{\frac{5}{4}} = 6x^{\frac{8}{4}} = 6x^2$$