



Math worksheet on 'Radicals - Convert Cube Root, Values and Variables, from Exponents - Negative (Level 2)'. Part of a broader unit on 'Radicals - Simplifying Advanced'

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- 2** Convert the fractional exponent to a radical

$$11^{-\frac{1}{3}} \cdot x^{-\frac{4}{3}} \cdot y^{-\frac{2}{3}}$$

a	b	c	d	e
$x\sqrt[3]{7x^2y}$	$\frac{1}{x^3\sqrt[3]{14xy^4}}$	$\frac{1}{4x\sqrt[3]{13xy^4}}$	$\frac{1}{x\sqrt[3]{11xy^3}}$	$\frac{1}{\sqrt[3]{11x^4y^2}}$

- 4** Convert the fractional exponent to a radical

$$11^{-\frac{1}{3}} \cdot c^{-\frac{1}{3}} \cdot r^{-\frac{5}{3}}$$

a	b
$\frac{1}{2r^3\sqrt[3]{8c^2r^4}}$	$\frac{1}{\sqrt[3]{11cr^5}}$
$\frac{1}{r^2\sqrt[3]{14c^3r^3}}$	$\frac{1}{r\sqrt[3]{12cr}}$
$2r\sqrt[3]{14cr^2}$	

- 6** Convert the fractional exponent to a radical

$$7^{-\frac{1}{3}} \cdot x^{-\frac{1}{3}} \cdot n^{-\frac{4}{3}}$$

a	b
$\frac{1}{3n\sqrt[3]{9x^2n}}$	$\frac{1}{\sqrt[3]{7xn^4}}$
$n^2\sqrt[3]{6x^3n}$	$\frac{1}{2n^2\sqrt[3]{9xn}}$

- 1** Convert the fractional exponent to a radical

$$3^{-\frac{1}{3}} \cdot z^{-\frac{1}{3}} \cdot n^{-\frac{4}{3}}$$

a	b	c	d	e
$\frac{1}{n\sqrt[3]{4zn^3}}$	$n\sqrt[3]{zn^2}$	$\frac{1}{\sqrt[3]{3zn^4}}$	$\frac{1}{4n\sqrt[3]{zn}}$	$\frac{1}{4n\sqrt[3]{4zn}}$

- 3** Convert the fractional exponent to a radical

$$5^{-\frac{1}{3}} \cdot n^{-\frac{2}{3}} \cdot b^{-\frac{4}{3}}$$

a	b	c	d	e
$b^3\sqrt[3]{5nb}$	$\frac{1}{3b\sqrt[3]{6nb}}$	$\frac{1}{b\sqrt[3]{6n^4b}}$	$\frac{1}{b\sqrt[3]{2nb}}$	$\frac{1}{\sqrt[3]{5n^2b^4}}$

- 5** Convert the fractional exponent to a radical

$$3^{-\frac{1}{3}} \cdot y^{-\frac{5}{3}} \cdot d^{-\frac{5}{3}}$$

a	b	c	d	e
$\frac{1}{\sqrt[3]{3y^5d^5}}$	$\frac{1}{yd^3\sqrt[3]{3y^4d}}$	$yd^2\sqrt[3]{yd}$	$\frac{1}{4y^2d\sqrt[3]{3y^3d^3}}$	$\frac{1}{y^2d\sqrt[3]{yd}}$

- 7** Convert the fractional exponent to a radical

$$2^{-\frac{1}{3}} \cdot b^{-\frac{5}{3}} \cdot n^{-\frac{1}{3}}$$

a	b	c	d	e
$b\sqrt[3]{b^4n^2}$	$\frac{1}{b\sqrt[3]{3bn}}$	$\frac{1}{\sqrt[3]{2b^5n}}$	$\frac{1}{b^2\sqrt[3]{b^2n}}$	$\frac{1}{b\sqrt[3]{2b^3n}}$