



Math worksheet on 'Radicals - Convert Square Root, Values and Variables, from Exponents - Positive (Level 1)'. Part of a broader unit on 'Radicals - Simplifying Intro'

Learn online: app.mobius.academy/math/units/radicals_simplifying_intro/

1 Convert the fractional exponent to a radical

a	b	c
$3p^3\sqrt{2p}$	$p\sqrt{2p}$	$\sqrt{3p^3}$
$3^{\frac{1}{2}} \cdot p^{\frac{3}{2}}$		
d	e	f
$p\sqrt{p^2}$	$p^3\sqrt{3p^2}$	$p\sqrt{p}$

2 Convert the fractional exponent to a radical

a	b	c
$\sqrt{7c}$	$2\sqrt{10c}$	$\sqrt{11c^3}$
$11^{\frac{1}{2}} \cdot c^{\frac{1}{2}}$		
d	e	f
$\sqrt{8c^2}$	$\sqrt{10c}$	$\sqrt{11c}$

3 Convert the fractional exponent to a radical

a	b	c
$4\sqrt{14n}$	$\sqrt{13n}$	$\sqrt{11n}$
$11^{\frac{1}{2}} \cdot n^{\frac{1}{2}}$		
d	e	f
$4\sqrt{11n^2}$	$4\sqrt{7n^3}$	$\sqrt{13n^3}$

4 Convert the fractional exponent to a radical

a	b	c
$x\sqrt{9x^2}$	$3x^2\sqrt{8x}$	$\sqrt{7x^3}$
$7^{\frac{1}{2}} \cdot x^{\frac{3}{2}}$		
d	e	f
$4x^2\sqrt{6x}$	$x\sqrt{6x}$	$3x\sqrt{8x}$

5 Convert the fractional exponent to a radical

a	b	c
$\sqrt{3p^3}$	$\sqrt{2p}$	\sqrt{p}
$2^{\frac{1}{2}} \cdot p^{\frac{1}{2}}$		
d	e	f
$4\sqrt{4p}$	$\sqrt{5p}$	$\sqrt{2p^3}$

6 Convert the fractional exponent to a radical

a	b	c
$3\sqrt{2y}$	\sqrt{y}	$\sqrt{5y^3}$
$3^{\frac{1}{2}} \cdot y^{\frac{1}{2}}$		
d	e	f
$3\sqrt{y}$	$3\sqrt{4y^3}$	$\sqrt{3y}$

7 Convert the fractional exponent to a radical

a	b	c
$\sqrt{11b}$	$\sqrt{10b}$	$\sqrt{9b}$
$11^{\frac{1}{2}} \cdot b^{\frac{1}{2}}$		
d	e	f
$\sqrt{13b}$	$\sqrt{7b}$	$2\sqrt{14b^3}$