



Math worksheet on 'Radicals - Square - Simplify From Squared Factors, Values and Variables, Radical Remaining (Level 1)'. Part of a broader unit on 'Radicals - Simplifying Intro'

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

1 Simplify the radical

$$\sqrt{2^2 \cdot 2 \cdot b}$$

a	b	c	d	e	f
$3\sqrt{b}$	$2\sqrt{2b}$	$3\sqrt{5b}$	$\sqrt{5b^2}$	$2\sqrt{b^2}$	$5\sqrt{3b^2}$

2 Simplify the radical

$$\sqrt{2^2 \cdot 2^2 \cdot 11 \cdot y^2}$$

a	b	c	d	e	f
$y^2\sqrt{14}$	$5y\sqrt{12}$	$4y\sqrt{11}$	$7y\sqrt{7}$	$6y^3\sqrt{12}$	$5y^3\sqrt{14}$

3 Simplify the radical

$$\sqrt{3^2 \cdot 3 \cdot r^2}$$

a	b	c	d	e	f
$2r\sqrt{2}$	$2r^2\sqrt{5}$	$2r\sqrt{4}$	$3r$	$3r\sqrt{3}$	$r^2\sqrt{6}$

4 Simplify the radical

$$\sqrt{5^2 \cdot 5 \cdot p}$$

a	b	c	d	e	f
$8\sqrt{2p}$	$5\sqrt{5p}$	$7\sqrt{p^3}$	$3\sqrt{2p^3}$	$8\sqrt{3p^2}$	$\sqrt{2p^3}$

5 Simplify the radical

$$\sqrt{2^2 \cdot 2^2 \cdot 7 \cdot b}$$

a	b	c	d	e	f
$4\sqrt{7b}$	$6\sqrt{8b}$	$4\sqrt{4b}$	$\sqrt{4b^3}$	$2\sqrt{5b}$	$5\sqrt{5b}$

6 Simplify the radical

$$\sqrt{3 \cdot 5^2 \cdot x}$$

a	b	c	d	e	f
$5\sqrt{3x}$	$2\sqrt{x^3}$	$6\sqrt{x}$	$3\sqrt{5x^3}$	$7\sqrt{x}$	$6\sqrt{4x}$

7 Simplify the radical

$$\sqrt{2^2 \cdot 2 \cdot x^2 \cdot x}$$

a	b	c	d	e	f
$4x\sqrt{4x^2}$	$5x\sqrt{x^2}$	$x\sqrt{4x}$	$2x\sqrt{2x^2}$	$x\sqrt{x}$	$2x\sqrt{2x}$