



Math worksheet on 'Radicals - Cube - Simplifying from Factors, Values and Variables, Nothing Remaining (Level 3)'. Part of a broader unit on 'Radicals - Simplifying Advanced'

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1 Simplify the radical

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

a	b	c	d	e	f
$x^2y\sqrt{2}$	$xy^2\sqrt{2}$	$4x^3y$	$x^2y^3$	$2x^2y$	$3xy^3$

2 Simplify the radical

$$\sqrt{2 \cdot 2 \cdot n \cdot n \cdot p \cdot p}$$

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

3 Simplify the radical

$$\sqrt{3 \cdot 3 \cdot d \cdot d \cdot y \cdot y \cdot y \cdot y}$$

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

4 Simplify the radical

$$\sqrt{5 \cdot 5 \cdot z \cdot z \cdot y \cdot y}$$

a	b	c	d	e	f
$3z^3y^3$	$2zy\sqrt{2}$	$4zy^2\sqrt{3}$	$7z^2y$	$zy^2$	$5zy$

5 Simplify the radical

$$\sqrt{5 \cdot 5 \cdot d \cdot d \cdot z \cdot z}$$

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

6 Simplify the radical

$$\sqrt{3 \cdot 3 \cdot n \cdot n \cdot n \cdot n \cdot p \cdot p}$$

a	b	c	d	e	f
$3np^2$	$6n^4p$	$2np^2$	$np\sqrt{4}$	$3n^2p$	$n^2p$

7 Simplify the radical

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

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