



Math worksheet on 'Radicals - Cube - Simplifying from Factors, Values and Variables, Radical Remaining (Level 3)'. Part of a broader unit on 'Radicals - Simplifying Advanced'

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2 Simplify the radical

$$\sqrt{3 \cdot 3 \cdot 5 \cdot d \cdot d \cdot n \cdot n}$$

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

1 Simplify the radical

$$\sqrt{5 \cdot 5 \cdot 11 \cdot p \cdot m \cdot m}$$

a	$6m\sqrt{14p^2}$	b	$5m\sqrt{13p}$
c	$2m^3\sqrt{11p^2}$	d	$5m\sqrt{11p}$
e	$2m^3\sqrt{14p^2}$	f	$8m^2\sqrt{7p}$

3 Simplify the radical

$$\sqrt{3 \cdot 3 \cdot 11 \cdot n \cdot n \cdot n \cdot n \cdot n \cdot b}$$

a	$2n^3\sqrt{11n^2b}$	b	$3n^3\sqrt{7nb^2}$
c	$6n\sqrt{10nb}$	d	$3n^2\sqrt{11nb}$
e	$6n\sqrt{7nb}$	f	$2n\sqrt{11n^3b}$

4 $\sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot c \cdot n \cdot n \cdot n \cdot n \cdot n}$

Simplify the radical

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

5 Simplify the radical

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

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

6 Simplify the radical

$$\sqrt{5 \cdot 5 \cdot 7 \cdot x \cdot x \cdot c \cdot c}$$

a	b	c	d	e	f
$8xc\sqrt{10}$	$5xc\sqrt{7}$	$6xc^2\sqrt{3}$	$8x^3c^3\sqrt{4}$	$3x^2c\sqrt{8}$	$5xc^3\sqrt{9}$

7 Simplify the radical

$$\sqrt{3 \cdot 5 \cdot 5 \cdot m \cdot m \cdot m \cdot p}$$

a	$m\sqrt{5mp}$	b	$4m\sqrt{m^3p}$
c	$4m\sqrt{3m^2p}$	d	$5m\sqrt{3mp}$
e	$3m\sqrt{4m^2p^2}$	f	$7m\sqrt{m^3p}$