Math worksheet on *'Radicals - Cube - Simplifying from Factors, Values and Variables, Radical Remaining (Level 2)'*. Part of a broader unit on *'Radicals - Simplifying Practice'*

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1 Simplify the radical

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

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

2 Simplify the radical

$\sqrt{3 \cdot 3 \cdot 7 \cdot d \cdot d \cdot d \cdot d}$

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

3 Simplify the radical

$\sqrt{2 \cdot 2 \cdot 11 \cdot n \cdot n \cdot n}$

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

4 Simplify the radical

$\sqrt{2 \cdot 2 \cdot 2 \cdot z}$

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

5 Simplify the radical

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

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

6 Simplify the radical

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

a	b
$3n\sqrt{11n}$	$4n\sqrt{11n}$
c	d
$n^2\sqrt{8n}$	$n^2\sqrt{11n}$
e	f
$3n^3\sqrt{9n}$	$6n^2\sqrt{13n^3}$

7 Simplify the radical

$\sqrt{2 \cdot 2 \cdot 11 \cdot z \cdot z}$

a	b	c	d	e	f
$4z\sqrt{10}$	$2z\sqrt{11}$	$z^3\sqrt{9}$	$z\sqrt{13}$	$z\sqrt{10}$	$2z^2\sqrt{10}$