Math worksheet on *'Radicals - Cube - Simplify From Cubed Factors, Values and Variables, Radical Remaining (Level 1)'*. Part of a broader unit on *'Radicals - Simplifying Practice'*

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1 Simplify the radical

$$\sqrt{5^2 \cdot 11 \cdot y^2 \cdot y \cdot}$$

a	$5y\sqrt{8y}$	**b**	$5y^3\sqrt{7y}$
c	$5y\sqrt{11y}$	**d**	$8y^2\sqrt{13y^3}$
e	$7y\sqrt{13y}$	**f**	$7y\sqrt{11y}$

2 Simplify the radical

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

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

3 Simplify the radical

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

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

4 Simplify the radical

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

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

5 Simplify the radical

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

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

6 Simplify the radical

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

a	$3r\sqrt{5r}$	**b**	$5r^3\sqrt{10r}$
c	$3r\sqrt{7r}$	**d**	$2r\sqrt{7r}$
e	$r\sqrt{10r^2}$	**f**	$r^3\sqrt{4r^2}$

7 Simplify the radical

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

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