Math worksheet on *'Radicals - Square - Simplify From Squared Factors, Values and Variables, Radical Remaining (Level 2)'*. Part of a broader unit on *'Radicals - Simplifying Intro'*

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1 Simplify the radical

$$\sqrt{2^2 \cdot 11 \cdot x^2 \cdot x^2.}$$

a	b	c	d	e	f
$5x^3\sqrt{8}$	$x^2\sqrt{13}$	$x^4\sqrt{14}$	$x\sqrt{10}$	$4x^4\sqrt{11}$	$2x^2\sqrt{11}$

2 Simplify the radical

$$\sqrt{3 \cdot 5^2 \cdot c^2 \cdot c^2.}$$

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

3 Simplify the radical

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

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

4 Simplify the radical

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

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

5 Simplify the radical

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

a	b	c	d	e	f
$2y^2\sqrt{11}$	$y^3\sqrt{7}$	$y\sqrt{13}$	$4y^2\sqrt{9}$	$y^3\sqrt{8}$	$y^2\sqrt{8}$

6 Simplify the radical

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

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

7 Simplify the radical

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

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