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

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1 Simplify the radical

$$\sqrt{125my^3}$$

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

2 Simplify the radical

$$\sqrt{32b^5n^2}$$

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

3 Simplify the radical

$$\sqrt{50c^4r^4}$$

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

4 Simplify the radical

$$\sqrt{20p^2m^2}$$

a	**b**	**c**	**d**	**e**	**f**
$5pm^2$	$pm^2\sqrt{2}$	pm	$pm\sqrt{5}$	$pm\sqrt{2}$	$2pm\sqrt{5}$

5 Simplify the radical

$$\sqrt{63y^2p}$$

a	$y^3\sqrt{7p}$	**b**	$2y^3\sqrt{3p}$
c	$5y^3\sqrt{9p^2}$	**d**	$3y\sqrt{7p}$
e	$y^2\sqrt{7p}$	**f**	$4y\sqrt{3p^3}$

6 Simplify the radical

$$\sqrt{112x^3b^5}$$

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

7 Simplify the radical

$$\sqrt{175z^3d^5}$$

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