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Math worksheet on *'Radicals - Cube - 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 $\sqrt{80y^2p}$

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

2 Simplify the radical $\sqrt{175nx}$

a $5\sqrt{8n^3x}$	**b** $5\sqrt{7nx}$	
c $8\sqrt{3n^2x^3}$	**d** $6\sqrt{7nx}$	
e $7\sqrt{6nx^2}$	**f** $8\sqrt{10nx}$	

3 Simplify the radical $\sqrt{20xr}$

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

4 Simplify the radical $\sqrt{20n^2c^5}$

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

5 Simplify the radical $\sqrt{112p^2d^5}$

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

6 Simplify the radical $\sqrt{50b^3x^3}$

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

7 Simplify the radical $\sqrt{63c^5n^4}$

a $4cn^2\sqrt{4c}$	**b** $2cn^4\sqrt{9c}$	
c $6c^4n\sqrt{10c}$	**d** $5cn\sqrt{3c}$	
e $2c^4n^3\sqrt{5c}$	**f** $3c^2n^2\sqrt{7c}$	