Name

Radicals - Adding and Subtracting - Simplification (Values and Variables)

1 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{5b^2} - \sqrt{45}$$

A	$b\sqrt{5} - 3\sqrt{5}$	B	$b\sqrt{5} - 2$
C	$b\sqrt{5} - \sqrt{4}$		

2 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{2y^3} + \sqrt{50y^4}$$

A	$y\sqrt{2y} + 3y^2\sqrt{2}$	B	$y\sqrt{2y} + y^4\sqrt{4}$
C	$y\sqrt{2y} + 5y^2\sqrt{2}$	D	$y\sqrt{2y} + y^3$

3 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{12p^2} - \sqrt{3}$$

A	$5p\sqrt{2} - \sqrt{3}$	B	$4p\sqrt{6} - 3\sqrt{2}$
C	$2p\sqrt{3} - \sqrt{3}$		

4 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{7} - \sqrt{175x^3}$$

A	$\sqrt{10} - 5x\sqrt{7x}$	B	$\sqrt{7} - 5x\sqrt{7x}$
C	$2\sqrt{5} - 5x\sqrt{7x}$	D	$2\sqrt{6} - 5x\sqrt{7x}$

5 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{7p^3} + \sqrt{28p^2}$$

A	$p^2\sqrt{10p} + 2p\sqrt{7}$	B	$p\sqrt{7p} + p^3\sqrt{5}$
C	$p\sqrt{7p} + 2p\sqrt{7}$	D	$3p^2\sqrt{5p} + 2p\sqrt{7}$
E	$p\sqrt{7p} + p^3\sqrt{9}$		

6 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{18c^3} - \sqrt{2}$$

A	$4c\sqrt{2c^3} - \sqrt{2}$	B	$2c\sqrt{c^3} - \sqrt{2}$
C	$3c\sqrt{2c} - \sqrt{2}$	D	$c\sqrt{3c^2} - \sqrt{2}$

7 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{2r^4} + \sqrt{32r^4}$$

A	$r\sqrt{5} + 4r^2\sqrt{2}$	B	$r^2\sqrt{2} + 4r^2\sqrt{2}$
C	$r^2\sqrt{2} + 2r^2$	D	$r\sqrt{4} + 3r^4\sqrt{5}$

8 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{3z} + \sqrt{75z^4}$$

A	$\sqrt{3z} + 5z^2\sqrt{3}$	B	$\sqrt{3z} + 5z^4$
C	$\sqrt{3z} + 3z^2$	D	$\sqrt{3z} + 7z^2$