



Radicals Simplifying

Simplify The Following Sum/Subtraction of Radicals

Name _____ Date _____

1. $\sqrt{14} + \sqrt{12} - \sqrt{18} + \sqrt{224}$

2. $-\sqrt{56} - \sqrt{27} - \sqrt{84} + \sqrt{126} + \sqrt{224}$

3. $\sqrt{77} - \sqrt{39} + \sqrt{63} + \sqrt{45} - \sqrt{80} - \sqrt{7} + \sqrt{49}$

4. $\sqrt{80} - \sqrt{48} + \sqrt{96} + \sqrt{48} - \sqrt{45} - \sqrt{25}$

5. $-\sqrt{5} + \sqrt{165} + \sqrt{208} - \sqrt{18} - \sqrt{165} + \sqrt{117} + \sqrt{36}$

6. $-\sqrt{110} + \sqrt{156} - \sqrt{56} - \sqrt{22} + \sqrt{110} + \sqrt{22} + \sqrt{56} - \sqrt{121}$



Answers

Simplify The Following Sum/Subtraction of Radicals

$$1. \sqrt{14} + \sqrt{12} - \sqrt{18} + \sqrt{224}$$
$$5\sqrt{14} + 2\sqrt{3} - 3\sqrt{2}$$

$$2. -\sqrt{56} - \sqrt{27} - \sqrt{84} + \sqrt{126} + \sqrt{224}$$
$$5\sqrt{14} - 3\sqrt{3} - 2\sqrt{21}$$

$$3. \sqrt{77} - \sqrt{39} + \sqrt{63} + \sqrt{45} - \sqrt{80} - \sqrt{7} + \sqrt{49}$$
$$\sqrt{77} - \sqrt{39} + 2\sqrt{7} - \sqrt{5} + 7$$

$$4. \sqrt{80} - \sqrt{48} + \sqrt{96} + \sqrt{48} - \sqrt{45} - \sqrt{25}$$
$$\sqrt{5} + 4\sqrt{6} - 5$$

$$5. -\sqrt{5} + \sqrt{165} + \sqrt{208} - \sqrt{18} - \sqrt{165} + \sqrt{117} + \sqrt{36}$$
$$-\sqrt{5} + 7\sqrt{13} - 3\sqrt{2} + 6$$

$$6. -\sqrt{110} + \sqrt{156} - \sqrt{56} - \sqrt{22} + \sqrt{110} + \sqrt{22} + \sqrt{56} - \sqrt{121}$$
$$+ 2\sqrt{39} - 11$$