

Name: _____

Adding and Subtracting Radical Expressions

Simplify each expression.

1) $5\sqrt{3} - 3\sqrt{3} + 4\sqrt{8}$

2) $11\sqrt{28} + \sqrt{7} + 2\sqrt{7}$

3) $24\sqrt{5} - 9\sqrt{5}$

4) $-3\sqrt{11} - 2\sqrt{44} - 5\sqrt{10}$

5) $\sqrt{18} + 8\sqrt{27} - 7\sqrt{3}$

6) $-2\sqrt{20} + 2\sqrt{45} - \sqrt{5}$

7) $-9\sqrt{15} + 10\sqrt{15}$

8) $-3\sqrt{24} - \sqrt{6}$

Adding and Subtracting Radical Expressions

Simplify each expression.

1) $5\sqrt{3} - 3\sqrt{3} + 4\sqrt{8}$

$$\underline{2\sqrt{3} + 8\sqrt{2}}$$

2) $11\sqrt{28} + \sqrt{7} + 2\sqrt{7}$

$$\underline{25\sqrt{7}}$$

3) $24\sqrt{5} - 9\sqrt{5}$

$$\underline{15\sqrt{5}}$$

4) $-3\sqrt{11} - 2\sqrt{44} - 5\sqrt{10}$

$$\underline{-7\sqrt{11} - 5\sqrt{10}}$$

5) $\sqrt{18} + 8\sqrt{27} - 7\sqrt{3}$

$$\underline{3\sqrt{2} + 17\sqrt{3}}$$

6) $-2\sqrt{20} + 2\sqrt{45} - \sqrt{5}$

$$\underline{\sqrt{5}}$$

7) $-9\sqrt{15} + 10\sqrt{15}$

$$\underline{\sqrt{15}}$$

8) $-3\sqrt{24} - \sqrt{6}$

$$\underline{-7\sqrt{6}}$$