

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Adding and Subtracting Radical Expressions

**Simplify the Radical Expressions.**

1)  $-\sqrt{27} + \sqrt{63} - \sqrt{12}$

6)  $-6\sqrt{63} - \sqrt{54} + 7\sqrt{28}$

2)  $4\sqrt{24} - 2\sqrt{24} + 6\sqrt{24}$

7)  $-\sqrt{44} - \sqrt{8} - \sqrt{99} + \sqrt{32}$

3)  $-\sqrt{8} + \sqrt{8}$

8)  $8\sqrt{44} - 9\sqrt{28} + 2\sqrt{99} - 3\sqrt{112}$

4)  $4\sqrt{99} - 4\sqrt{45} + 3\sqrt{176} - 6\sqrt{20}$

9)  $-\sqrt{96} + \sqrt{96}$

5)  $\sqrt{44} - \sqrt{28} + \sqrt{99}$

10)  $-3\sqrt{28} + 4\sqrt{28} + 8\sqrt{28}$



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## Adding and Subtracting Radical Expressions

Simplify the Radical Expressions.

$$1) \quad -\sqrt{27} + \sqrt{63} - \sqrt{12} \\ -5\sqrt{3} + 3\sqrt{7}$$

$$6) \quad -6\sqrt{63} - \sqrt{54} + 7\sqrt{28} \\ -4\sqrt{7} - 3\sqrt{6}$$

$$2) \quad 4\sqrt{24} - 2\sqrt{24} + 6\sqrt{24} \\ 16\sqrt{6}$$

$$7) \quad -\sqrt{44} - \sqrt{8} - \sqrt{99} + \sqrt{32} \\ -5\sqrt{11} + 2\sqrt{2}$$

$$3) \quad -\sqrt{8} + \sqrt{8} \\ 0$$

$$8) \quad 8\sqrt{44} - 9\sqrt{28} + 2\sqrt{99} - 3\sqrt{112} \\ 22\sqrt{11} - 30\sqrt{7}$$

$$4) \quad 4\sqrt{99} - 4\sqrt{45} + 3\sqrt{176} - 6\sqrt{20} \\ 24\sqrt{11} - 24\sqrt{5}$$

$$9) \quad -\sqrt{96} + \sqrt{96} \\ 0$$

$$5) \quad \sqrt{44} - \sqrt{28} + \sqrt{99} \\ 5\sqrt{11} - 2\sqrt{7}$$

$$10) \quad -3\sqrt{28} + 4\sqrt{28} + 8\sqrt{28} \\ 18\sqrt{7}$$

