

Addition & Subtraction of Radicals

Recall for addition: *can only add like terms*

$$\begin{array}{r} 3x + 4x \\ 7x \end{array}$$

$$\begin{array}{r} 2a + 9b + 5a - 6b \\ 2a + 5a + 9b - 6b \\ 7a + 3b \end{array}$$

$$\begin{array}{r} 3x^2 + 5x + 4x + 5x^2 \\ 3x^2 + 5x^2 + 5x + 4x \\ 8x^2 + 9x \end{array}$$

$$\begin{array}{r} 7x - 3y + 3x - 3y \\ 7x + 3x - 3y - 3y \\ 10x - 6y \end{array}$$

Examples:

$$\begin{array}{r} 1. \quad 4\sqrt{5} + 7\sqrt{5} \\ 11\sqrt{5} \end{array}$$

$$\begin{array}{r} 2. \quad 7\sqrt{3} - 2\sqrt{3} \\ 5\sqrt{3} \end{array}$$

$$\begin{array}{r} 3. \quad 6\sqrt{2} - 7\sqrt{2} + 3\sqrt{2} \\ -\sqrt{2} + 3\sqrt{2} \\ 2\sqrt{2} \end{array}$$

$$\begin{array}{r} 4. \quad 5\sqrt{3} - 1\sqrt{3} \\ 4\sqrt{3} \end{array}$$

$$\begin{array}{r} 5. \quad 10\sqrt{7} - 7\sqrt{7} \\ 3\sqrt{7} \end{array}$$

$$\begin{array}{r} 6. \quad 8\sqrt{11} + 4\sqrt{11} \\ 12\sqrt{11} \end{array}$$

$$\begin{array}{r} 7. \quad 9\sqrt{6} + 1\sqrt{6} \\ 10\sqrt{6} \end{array}$$

$$\begin{array}{r} 8. \quad 3\sqrt{5} + 2\sqrt{5} + 7\sqrt{3} \\ \boxed{\sqrt{5\sqrt{5} + 7\sqrt{3}}} \end{array}$$

HOMEWORK

Worksheet - Add & Subtract
Radicals