

## Add/Subtract Radicals 1 - KEY

**Add/Subtract as indicated. Simplify your answers Completely.**

$$1) \quad 5\sqrt{3} + 2\sqrt{3} = 7\sqrt{3}$$

$$2) \quad 8\sqrt{6} - 5\sqrt{6} = 3\sqrt{6}$$

$$3) \quad 6\sqrt{2} + \sqrt{2} = 7\sqrt{2}$$

$$4) \quad 3\sqrt{7} - 9\sqrt{7} = -6\sqrt{7}$$

$$5) \quad -4\sqrt{5} - 6\sqrt{5} = -10\sqrt{5}$$

$$6) \quad \sqrt{6} + \sqrt{6} = 2\sqrt{6}$$

$$7) \quad \sqrt{9} + \sqrt{4} = 3 + 2 = 5$$

$$8) \quad \sqrt{6} + \sqrt{3} \quad \text{Simplified}$$

$$9) \quad 5\sqrt{x} + 9\sqrt{x} = 14\sqrt{x}$$

$$10) \quad 7\sqrt{2x} + 3\sqrt{2x} = 10\sqrt{2x}$$

$$11) \quad 8x\sqrt{3} - 6x\sqrt{3} = 2x\sqrt{3}$$

$$12) \quad \sqrt{8} + 3\sqrt{2} = 5\sqrt{2}$$

$$13) \quad \sqrt{18} + \sqrt{32} = 7\sqrt{2}$$

$$14) \quad 5\sqrt{3} + \sqrt{12} = 7\sqrt{3}$$

$$15) \quad \sqrt{72} - \sqrt{50} = \sqrt{2}$$

$$16) \quad \sqrt{24} + 5\sqrt{6} = 7\sqrt{6}$$

$$17) \quad 3\sqrt{2} - 6\sqrt{2} + 7\sqrt{2} = 4\sqrt{2}$$

$$18) \quad 2\sqrt{5} + 7\sqrt{5} - 10\sqrt{5} = -\sqrt{5}$$

$$19) \quad \sqrt{8} + \sqrt{27} + \sqrt{32} \\ = 6\sqrt{2} + 3\sqrt{3}$$

$$20) \quad 3\sqrt{12} - 2\sqrt{18} + 6\sqrt{27} \\ = 24\sqrt{3} - 6\sqrt{2}$$