

## Addition and Subtraction of Radicals

$$1. \sqrt[3]{48} + 2\sqrt[3]{6} - 5\sqrt[6]{36}$$

$$2. x\sqrt{11} - 2y\sqrt{11} + 6\sqrt{11}$$

$$3. \sqrt[4]{243} - 2\sqrt[4]{3}$$

$$4. 3x\sqrt{16x^3} - 2x^2\sqrt{x} + \sqrt[6]{x^3}$$

$$5. 5\sqrt[3]{64x^5y} - 3\sqrt[3]{27x^2y}$$

$$6. \sqrt[4]{80} + \sqrt[4]{\frac{1}{125}} - \sqrt[8]{25}$$

$$7. \sqrt[3]{250x^5y} - \sqrt[6]{256x^4y^2} + \sqrt[3]{54x^8y}$$

$$8. \sqrt[5]{64x^{-3}} + \sqrt[5]{-180x^7}$$

$$9. x\sqrt{x} - \sqrt{4x^3} + \sqrt{9x}$$

$$10. \sqrt[3]{5} - \sqrt[3]{40} + 3\sqrt[6]{25}$$

$$11. \sqrt{\frac{4}{3}} + \sqrt{75} - \sqrt{\frac{12}{25}}$$

$$12. 3\sqrt{\frac{1}{7}} + \sqrt{112} + \sqrt{63}$$

$$13. 2\sqrt[3]{125x^4y} - 5\sqrt[3]{27xy^4}$$

$$14. \sqrt[4]{48} + \sqrt[4]{\frac{1}{27}} - \sqrt[3]{9}$$

$$15. \sqrt{\frac{x}{7y}} - \frac{3}{\sqrt{7xy}} + \sqrt[4]{\frac{49y^2}{x^2}}$$

$$16. 3\sqrt[3]{24} - \sqrt[3]{81} + \sqrt[3]{54}$$

$$17. 4\sqrt[3]{81x^4y^2} - 2x\sqrt[6]{576x^8y^4} + \sqrt[3]{24x^4y^2}$$

$$18. \sqrt{27x^4 - 54x^3 + 27x^2} - \sqrt{75} + \sqrt{12x^4}$$