

### Addition and Subtraction of Radicals.

1.  $4\sqrt{3} - 7\sqrt{3}$

2.  $\sqrt[3]{9x} - 5x\sqrt[3]{9x}$

3.  $8\sqrt{3} - 2\sqrt{27}$

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

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

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

7.  $\sqrt[6]{25x^2} - x^2\sqrt[7]{125x^3} - 3\sqrt[3]{5x}$

8.  $3x\sqrt{16x^3} + 2x^2\sqrt{x} + \sqrt[6]{x^3}$

9.  $5\sqrt{\frac{1}{6}} - \sqrt{54} + 2\sqrt{150}$

10.  $4\sqrt{2x} - 5\sqrt[3]{2x} + 3\sqrt[6]{4x^2} - 7\sqrt[6]{8x^3} + 6\sqrt{\frac{9}{2}}x$

11.  $5\sqrt[3]{64x^5y} - 3\sqrt[3]{27x^2y}$

12.  $\sqrt{\frac{9}{5}} + \sqrt{125} - \sqrt{\frac{20}{9}}$

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

14.  $\sqrt{\frac{a}{11x}} - \frac{3}{\sqrt{11ax}} + \sqrt{\frac{121a^2}{x^2}}$

15.  $\sqrt{\frac{x-3}{x+2}} - \sqrt{\frac{x+2}{x-3}}$

16.  $\sqrt{\frac{x+y}{x-y}} + \sqrt{\frac{x-y}{x+y}}$

17.  $\sqrt{20x^4 + 80x^3 + 80x^2} - \sqrt{20x^4 + 20x^3 + 5x^2}$

18.  $\sqrt{\frac{x}{y}} - 2 + 3\sqrt{1 - \frac{2y}{x}} - \frac{2}{x}\sqrt{x^3y^2 - 2x^2y^3}$

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

20.  $\sqrt{54} + \sqrt{18}$

21.  $\sqrt[3]{81} + \sqrt[3]{192} + \sqrt[3]{16}$

22.  $\sqrt[3]{16} + \sqrt[3]{-250}$

23.  $\sqrt[3]{x^{-2}} + \sqrt[3]{8x^4}$

24.  $\sqrt[5]{64x^{-3}} + \sqrt[5]{-486x^7}$

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

26.  $2\sqrt[3]{125x^4y} - 5\sqrt[3]{27xy^4}$

27.  $\sqrt{\frac{x}{7y}} - \frac{3}{\sqrt{7xy}} + \sqrt{\frac{49y^2}{x^2}}$

28.  $4\sqrt[3]{81x^4y^2} - 2x\sqrt[6]{576x^8y^4} + \sqrt[3]{24x^4y^2}$