

Simplify

$$\begin{array}{l} \underline{1} \quad \sqrt{12} \\ 2\sqrt{3} \end{array}$$

$$\begin{array}{l} \underline{4} \quad \sqrt{45} \\ 3\sqrt{5} \end{array}$$

$$\begin{array}{l} \underline{2} \quad \sqrt{18} \\ 3\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{5} \quad \sqrt{72} \\ 6\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{3} \quad \sqrt{50} \\ 5\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{6} \quad \sqrt{200} \\ 10\sqrt{2} \end{array}$$

Simplify

$$\begin{array}{l} \underline{7} \quad \sqrt{3} \times \sqrt{5} \\ \sqrt{15} \end{array}$$

$$\begin{array}{l} \underline{8} \quad \sqrt{2} \times \sqrt{8} \\ 4 \end{array}$$

$$\begin{array}{l} \underline{9} \quad \sqrt{6} \times \sqrt{3} \\ 3\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{10} \quad (\sqrt{7})^2 \\ 7 \end{array}$$

$$\begin{array}{l} \underline{11} \quad 2\sqrt{3} \times 5\sqrt{2} \\ 10\sqrt{6} \end{array}$$

$$\begin{array}{l} \underline{12} \quad \frac{\sqrt{48}}{\sqrt{3}} \\ 4 \end{array}$$

Simplify

$$\begin{array}{l} \underline{13} \quad 3\sqrt{2} + 5\sqrt{2} \\ 8\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{14} \quad 7\sqrt{5} - 2\sqrt{5} \\ 5\sqrt{5} \end{array}$$

$$\begin{array}{l} \underline{15} \quad \sqrt{12} + \sqrt{27} \\ 5\sqrt{3} \end{array}$$

$$\begin{array}{l} \underline{16} \quad \sqrt{50} - \sqrt{8} \\ 3\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{17} \quad \sqrt{20} + \sqrt{45} \\ 5\sqrt{5} \end{array}$$

$$\begin{array}{l} \underline{18} \quad 2\sqrt{18} - \sqrt{32} \\ 2\sqrt{2} \end{array}$$

Expand and simplify

$$\begin{array}{l} \underline{19} \quad \sqrt{2}(3 + \sqrt{2}) \\ 2 + 3\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{20} \quad (2 + \sqrt{3})(1 + \sqrt{3}) \\ 5 + 3\sqrt{3} \end{array}$$

$$\begin{array}{l} \underline{21} \quad (4 - \sqrt{5})(4 + \sqrt{5}) \\ 11 \end{array}$$

$$\begin{array}{l} \underline{22} \quad (3 + \sqrt{2})^2 \\ 11 + 6\sqrt{2} \end{array}$$

$$\begin{array}{l} \underline{23} \quad (\sqrt{7} - 1)^2 \\ 8 - 2\sqrt{7} \end{array}$$

$$\begin{array}{l} \underline{24} \quad (5 - \sqrt{3})(2 + \sqrt{3}) \\ 7 + 3\sqrt{3} \end{array}$$

Rationalise the denominator

$$\begin{array}{l} \underline{25} \quad \frac{1}{\sqrt{2}} \\ \frac{\sqrt{2}}{2} \end{array}$$

$$\begin{array}{l} \underline{26} \quad \frac{6}{\sqrt{3}} \\ 2\sqrt{3} \end{array}$$

$$\begin{array}{l} \underline{27} \quad \frac{10}{\sqrt{5}} \\ 2\sqrt{5} \end{array}$$

$$\begin{array}{l} \underline{28} \quad \frac{3}{\sqrt{6}} \\ \frac{\sqrt{6}}{2} \end{array}$$

$$\begin{array}{l} \underline{29} \quad \frac{5}{2\sqrt{5}} \\ \frac{\sqrt{5}}{2} \end{array}$$

$$\begin{array}{l} \underline{30} \quad \frac{4 + \sqrt{2}}{\sqrt{2}} \\ 1 + 2\sqrt{2} \end{array}$$