

平方根（根号を含む式の加法・減法）

組 番 名前

1 次の式を簡単にしなさい。

$$\begin{aligned} \textcircled{1} \quad & 4\sqrt{2} + 2\sqrt{2} \\ & = 6\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 6\sqrt{5} - 3\sqrt{5} \\ & = 3\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \sqrt{3} + 5\sqrt{3} - 4\sqrt{3} \\ & = 2\sqrt{3} \end{aligned}$$

2 次の式を簡単にしなさい。

$$\begin{aligned} \textcircled{1} \quad & 2\sqrt{6} - 8\sqrt{6} + 3 \\ & = -6\sqrt{6} + 3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 5\sqrt{2} - 2\sqrt{3} + 4\sqrt{3} \\ & = 5\sqrt{2} + 2\sqrt{3} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & -\sqrt{5} + 4\sqrt{7} - 6\sqrt{5} \\ & = -7\sqrt{5} + 4\sqrt{7} \end{aligned}$$

3 次の式を計算をしなさい。

$$\begin{aligned} \textcircled{1} \quad & \sqrt{5} + \sqrt{20} \\ & = \sqrt{5} + 2\sqrt{5} \\ & = 3\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \sqrt{18} + \sqrt{32} \\ & = 3\sqrt{2} + 4\sqrt{2} \\ & = 7\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \sqrt{27} + \sqrt{12} \\ & = 3\sqrt{3} + 2\sqrt{3} \\ & = 5\sqrt{3} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & \sqrt{54} - \sqrt{6} \\ & = 3\sqrt{6} - \sqrt{6} \\ & = 2\sqrt{6} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & \sqrt{40} - \sqrt{250} \\ & = 2\sqrt{10} - 5\sqrt{10} \\ & = -3\sqrt{10} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & -\sqrt{28} - \sqrt{63} \\ & = -2\sqrt{7} - 3\sqrt{7} \\ & = -5\sqrt{7} \end{aligned}$$

4 次の式を計算をしなさい。

$$\begin{aligned} \textcircled{1} \quad & \sqrt{5} + \sqrt{18} + \sqrt{50} \\ & = \sqrt{5} + 3\sqrt{2} + 5\sqrt{2} \\ & = \sqrt{5} + 8\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \sqrt{32} - 3\sqrt{2} + \sqrt{75} \\ & = 4\sqrt{2} - 3\sqrt{2} + 5\sqrt{3} \\ & = \sqrt{2} + 5\sqrt{3} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \sqrt{60} - \sqrt{20} - 5\sqrt{15} \\ & = 2\sqrt{15} - 2\sqrt{5} - 5\sqrt{15} \\ & = -3\sqrt{15} - 2\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & \sqrt{32} + \sqrt{2} + \sqrt{50} \\ & = 4\sqrt{2} + \sqrt{2} + 5\sqrt{2} \\ & = 10\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & \sqrt{2} + \frac{8}{\sqrt{2}} \\ & = \sqrt{2} + \frac{8 \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} \\ & = \sqrt{2} + 4\sqrt{2} \\ & = 5\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & \frac{12}{\sqrt{3}} - 3\sqrt{3} \\ & = \frac{12 \times \sqrt{3}}{\sqrt{3} \times \sqrt{3}} - 3\sqrt{3} \\ & = 4\sqrt{3} - 3\sqrt{3} \\ & = \sqrt{3} \end{aligned}$$