

1 次の計算をなさい。

① $2\sqrt{3} \times 3\sqrt{6}$

② $\sqrt{8} \times (-2\sqrt{6})$

2 次の計算をなさい。

① $4\sqrt{10} \div \sqrt{2}$

② $6\sqrt{21} \div 3\sqrt{3}$

3 次の計算をなさい。

① $\sqrt{42} \times \sqrt{5} \div \sqrt{3}$

② $\sqrt{40} \div 3\sqrt{6} \times (-2\sqrt{3})$

③ $\frac{\sqrt{35}}{2} \times (-4\sqrt{3}) \div \sqrt{7}$

④ $\frac{\sqrt{24}}{5} \div (-\sqrt{6}) \times (-\sqrt{10})$

1 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad & 2\sqrt{3} \times 3\sqrt{6} \\ & = 2\sqrt{3} \times 3 \times \sqrt{2} \times \sqrt{3} \\ & = 2 \times 3 \times (\sqrt{3})^2 \times \sqrt{2} \\ & = 18\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \sqrt{8} \times (-2\sqrt{6}) \\ & = 2\sqrt{2} \times (-2) \times \sqrt{2} \times \sqrt{3} \\ & = -2 \times 2 \times (\sqrt{2})^2 \times \sqrt{3} \\ & = -8\sqrt{3} \end{aligned}$$

2 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad & 4\sqrt{10} \div \sqrt{2} \\ & = \frac{4\sqrt{10}}{\sqrt{2}} \\ & = 4 \times \sqrt{\frac{10}{2}} \\ & = 4\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 6\sqrt{21} \div 3\sqrt{3} \\ & = \frac{6\sqrt{21}}{3\sqrt{3}} \\ & = 2 \times \sqrt{\frac{21}{3}} \\ & = 2\sqrt{7} \end{aligned}$$

3 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad & \sqrt{42} \times \sqrt{5} \div \sqrt{3} \\ & = \frac{\sqrt{42} \times \sqrt{5}}{\sqrt{3}} \\ & = \sqrt{14} \times \sqrt{5} \\ & = \sqrt{70} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \sqrt{40} \div 3\sqrt{6} \times (-2\sqrt{3}) \\ & = -\frac{2\sqrt{10} \times 2\sqrt{3}}{3\sqrt{6}} \\ & = -\frac{2\sqrt{5} \times 2}{3} \\ & = -\frac{4\sqrt{5}}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \frac{\sqrt{35}}{2} \times (-4\sqrt{3}) \div \sqrt{7} \\ & = -\frac{\sqrt{35} \times 4\sqrt{3}}{2 \times \sqrt{7}} \\ & = -\sqrt{5} \times 2\sqrt{3} \\ & = -2\sqrt{15} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & \frac{\sqrt{24}}{5} \div (-\sqrt{6}) \times (-\sqrt{10}) \\ & = \frac{2\sqrt{6} \times \sqrt{10}}{5 \times \sqrt{6}} \\ & = \frac{2\sqrt{10}}{5} \end{aligned}$$