

# 根号を含む式の乗法

年 組 名前

/16

■ 次の計算をなさい。

①  $\sqrt{3} \times \sqrt{30}$

②  $\sqrt{2} \times \sqrt{10}$

③  $\sqrt{10} \times \sqrt{35}$

④  $\sqrt{3} \times 2\sqrt{6}$

⑤  $\sqrt{15} \times \sqrt{33}$

⑥  $\sqrt{20} \times \sqrt{40}$

⑦  $\sqrt{14} \times \sqrt{6}$

⑧  $\sqrt{12} \times \sqrt{15}$

⑨  $\sqrt{12} \times 3\sqrt{2}$

⑩  $\sqrt{24} \times \sqrt{14}$

⑪  $\sqrt{30} \times 3\sqrt{2}$

⑫  $\sqrt{8} \times \sqrt{22}$

⑬  $\sqrt{26} \times \sqrt{10}$

⑭  $\sqrt{10} \times \sqrt{22}$

⑮  $\sqrt{2} \times \sqrt{30}$

⑯  $\sqrt{38} \times \sqrt{10}$

■ 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad & \sqrt{3} \times \sqrt{30} \\ &= \sqrt{3 \times 2 \times 3 \times 5} \\ &= 3\sqrt{10} \end{aligned}$$

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

$$\begin{aligned} \textcircled{3} \quad & \sqrt{10} \times \sqrt{35} \\ &= \sqrt{2 \times 5 \times 5 \times 7} \\ &= 5\sqrt{14} \end{aligned}$$

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

$$\begin{aligned} \textcircled{5} \quad & \sqrt{15} \times \sqrt{33} \\ &= \sqrt{3 \times 5 \times 3 \times 11} \\ &= 3\sqrt{55} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & \sqrt{20} \times \sqrt{40} \\ &= \sqrt{2 \times 2 \times 5 \times 2 \times 2 \times 2 \times 5} \\ &= 20\sqrt{2} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & \sqrt{14} \times \sqrt{6} \\ &= \sqrt{2 \times 7 \times 2 \times 3} \\ &= 2\sqrt{21} \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & \sqrt{12} \times \sqrt{15} \\ &= \sqrt{2 \times 2 \times 3 \times 3 \times 5} \\ &= 6\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & \sqrt{12} \times 3\sqrt{2} \\ &= 3\sqrt{2 \times 2 \times 3 \times 2} \\ &= 6\sqrt{6} \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & \sqrt{24} \times \sqrt{14} \\ &= \sqrt{2 \times 2 \times 2 \times 3 \times 2 \times 7} \\ &= 4\sqrt{21} \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad & \sqrt{30} \times 3\sqrt{2} \\ &= 3\sqrt{2 \times 3 \times 5 \times 2} \\ &= 6\sqrt{15} \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & \sqrt{8} \times \sqrt{22} \\ &= \sqrt{2 \times 2 \times 2 \times 2 \times 11} \\ &= 4\sqrt{11} \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad & \sqrt{26} \times \sqrt{10} \\ &= \sqrt{2 \times 13 \times 2 \times 5} \\ &= 2\sqrt{65} \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad & \sqrt{10} \times \sqrt{22} \\ &= \sqrt{2 \times 5 \times 2 \times 11} \\ &= 2\sqrt{55} \end{aligned}$$

$$\begin{aligned} \textcircled{15} \quad & \sqrt{2} \times \sqrt{30} \\ &= \sqrt{2 \times 2 \times 3 \times 5} \\ &= 2\sqrt{15} \end{aligned}$$

$$\begin{aligned} \textcircled{16} \quad & \sqrt{38} \times \sqrt{10} \\ &= \sqrt{2 \times 19 \times 2 \times 5} \\ &= 2\sqrt{95} \end{aligned}$$