

根号を含む式の乗法

年 組 名前

/16

■ 次の計算をなさい。

① $\sqrt{12} \times 2\sqrt{7}$

② $\sqrt{28} \times \sqrt{20}$

③ $\sqrt{33} \times \sqrt{22}$

④ $\sqrt{12} \times \sqrt{33}$

⑤ $4\sqrt{2} \times \sqrt{20}$

⑥ $\sqrt{10} \times \sqrt{22}$

⑦ $\sqrt{33} \times \sqrt{27}$

⑧ $\sqrt{20} \times \sqrt{6}$

⑨ $\sqrt{15} \times \sqrt{12}$

⑩ $\sqrt{6} \times \sqrt{24}$

⑪ $4\sqrt{2} \times \sqrt{2}$

⑫ $2\sqrt{7} \times \sqrt{18}$

⑬ $\sqrt{35} \times \sqrt{7}$

⑭ $4\sqrt{2} \times 2\sqrt{10}$

⑮ $\sqrt{18} \times \sqrt{14}$

⑯ $3\sqrt{2} \times \sqrt{32}$

■ 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad & \sqrt{12} \times 2\sqrt{7} \\ &= 2\sqrt{2 \times 2 \times 3 \times 7} \\ &= 4\sqrt{21} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \sqrt{28} \times \sqrt{20} \\ &= \sqrt{2 \times 2 \times 7 \times 2 \times 2 \times 5} \\ &= 4\sqrt{35} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \sqrt{33} \times \sqrt{22} \\ &= \sqrt{3 \times 11 \times 2 \times 11} \\ &= 11\sqrt{6} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & \sqrt{12} \times \sqrt{33} \\ &= \sqrt{2 \times 2 \times 3 \times 3 \times 11} \\ &= 6\sqrt{11} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 4\sqrt{2} \times \sqrt{20} \\ &= 4\sqrt{2 \times 2 \times 2 \times 5} \\ &= 8\sqrt{10} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & \sqrt{10} \times \sqrt{22} \\ &= \sqrt{2 \times 5 \times 2 \times 11} \\ &= 2\sqrt{55} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & \sqrt{33} \times \sqrt{27} \\ &= \sqrt{3 \times 11 \times 3 \times 3 \times 3} \\ &= 9\sqrt{11} \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & \sqrt{20} \times \sqrt{6} \\ &= \sqrt{2 \times 2 \times 5 \times 2 \times 3} \\ &= 2\sqrt{30} \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & \sqrt{15} \times \sqrt{12} \\ &= \sqrt{3 \times 5 \times 2 \times 2 \times 3} \\ &= 6\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & \sqrt{6} \times \sqrt{24} \\ &= \sqrt{2 \times 3 \times 2 \times 2 \times 2 \times 3} \\ &= 12 \end{aligned}$$

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

$$\begin{aligned} \textcircled{12} \quad & 2\sqrt{7} \times \sqrt{18} \\ &= 2\sqrt{7 \times 2 \times 3 \times 3} \\ &= 6\sqrt{14} \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad & \sqrt{35} \times \sqrt{7} \\ &= \sqrt{5 \times 7 \times 7} \\ &= 7\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad & 4\sqrt{2} \times 2\sqrt{10} \\ &= 8\sqrt{2 \times 2 \times 5} \\ &= 16\sqrt{5} \end{aligned}$$

$$\begin{aligned} \textcircled{15} \quad & \sqrt{18} \times \sqrt{14} \\ &= \sqrt{2 \times 3 \times 3 \times 2 \times 7} \\ &= 6\sqrt{7} \end{aligned}$$

$$\begin{aligned} \textcircled{16} \quad & 3\sqrt{2} \times \sqrt{32} \\ &= 3\sqrt{2 \times 2 \times 2 \times 2 \times 2 \times 2} \\ &= 24 \end{aligned}$$