

この2問は卒業問題みたいなもん。(総まとめ)
一発でスラスラできたら√の計算問題はOK!!

問題 次の計算をしなさい。

$$\textcircled{1} \quad \sqrt{12} - \sqrt{8} (2\sqrt{3} + \sqrt{6})$$

$$= 2\sqrt{3} - 2\sqrt{2} (2\sqrt{3} + \sqrt{6})$$

$$= 2\sqrt{3} - 4\sqrt{6} - 2\sqrt{12}$$

$$= 2\sqrt{3} - 4\sqrt{6} - 2 \times 2\sqrt{3}$$

$$= \underline{2\sqrt{3} - 4\sqrt{6} - 4\sqrt{3}}$$

$$= \underline{-2\sqrt{3} - 4\sqrt{6}}$$

$$\textcircled{2} \quad \frac{4}{\sqrt{2}} - \frac{3\sqrt{6} - \sqrt{2}}{\sqrt{3}} = \frac{4\sqrt{2}}{\sqrt{2} \times \sqrt{2}} - \frac{\sqrt{3}(3\sqrt{6} - \sqrt{2})}{\sqrt{3} \times \sqrt{3}}$$

$$= \frac{4\sqrt{2}}{2} - \frac{3\sqrt{18} - \sqrt{6}}{3}$$

$$= 2\sqrt{2} - \frac{3 \times 3\sqrt{2} - \sqrt{6}}{3}$$

$$= \frac{2\sqrt{2}}{1} - \frac{9\sqrt{2} - \sqrt{6}}{3}$$

$$= \frac{6\sqrt{2}}{3} - \frac{9\sqrt{2} - \sqrt{6}}{3}$$

$$= \frac{6\sqrt{2} - 9\sqrt{2} + \sqrt{6}}{3} = \underline{\underline{\frac{-3\sqrt{2} + \sqrt{6}}{3}}}$$

$$\begin{array}{r} 2 \overline{) 12} \\ 2 \overline{) 6} \\ 3 \overline{) 3} \\ 1 \end{array}$$

$$\sqrt{12} = 2\sqrt{3}$$

$$\begin{array}{r} 2 \overline{) 8} \\ 2 \overline{) 4} \\ 2 \overline{) 2} \\ 1 \end{array}$$

$$\sqrt{8} = 2\sqrt{2}$$