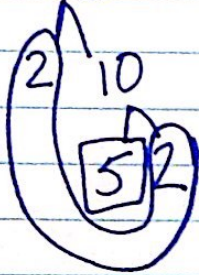


Simplifying Radicals

①

$$\sqrt{20}$$

$$\boxed{2\sqrt{5}}$$



③

$$\sqrt{45}$$

$$= \boxed{3\sqrt{5}}$$

$$9 \sqrt{5}$$

$$\textcircled{33}$$

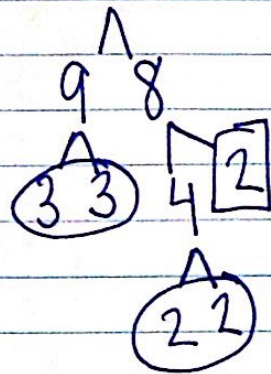
$$\sqrt{9} \cdot \sqrt{5}$$
$$3\sqrt{5}$$

④

$$\sqrt{72}$$

$$3 \cdot 2 \sqrt{2}$$

$$\boxed{6\sqrt{2}}$$



Adding Radicals

$$\textcircled{1} \quad -5\sqrt{5} + 7\sqrt{5} \rightarrow -5x + 7x$$

$2x$

$$\boxed{2\sqrt{5}}$$

$$\textcircled{2} \quad 4\sqrt{6} - 6\sqrt{6}$$
$$\boxed{-2\sqrt{6}}$$

$$\textcircled{3} \quad 6\sqrt{10} + 4\sqrt{10} - 2\sqrt{10}$$
$$\boxed{8\sqrt{10}}$$

Multiplying Radicals

$$\textcircled{1} \quad \underline{2}\sqrt{2} \cdot \underline{4}\sqrt{8}$$

$$8\sqrt{16}$$

$$\textcircled{44}$$

$$8 \cdot 4$$

$$\boxed{32}$$

$$\textcircled{2} \quad \sqrt{2} \cdot \sqrt{6}$$

$$\sqrt{12}$$

$$\begin{array}{r} 6 \\ \sqrt{12} \\ 3 \end{array} \begin{array}{r} 2 \\ 2 \end{array}$$

$$\boxed{2\sqrt{3}}$$

$$\textcircled{3} \sqrt{5} (\sqrt{3} + \sqrt{10})$$

$$\sqrt{15} + \sqrt{50}$$

$$\sqrt{35}$$

$$\sqrt{5 \cdot 10} = \sqrt{5 \cdot 2 \cdot 5} = 5\sqrt{2}$$

$$\boxed{\sqrt{15} + 5\sqrt{2}}$$