Samples **Evaluate or simplify SOLUTIONS**

1.

$$\begin{aligned}\sqrt{3}\left(\sqrt{2}-\sqrt{7}\right) &= \sqrt{3}\times\sqrt{2}-\sqrt{3}\times\sqrt{7}\\ &= \sqrt{3\times 2}-\sqrt{3\times 7}\\ &= \sqrt{6}-\sqrt{21}\end{aligned}$$

2.

$$\begin{aligned}\sqrt{8}\left(\sqrt{3}+\sqrt{8}\right) &= \sqrt{8}\times\sqrt{3}+\sqrt{8}\times\sqrt{8}\\ &= \sqrt{8\times 3}+\sqrt{8\times 8}\\ &= \sqrt{24}+8\\ &= 2\sqrt{6}+8\end{aligned}$$

3.

$$\begin{aligned}\left(\sqrt{2}-\sqrt{4}\right)\sqrt{5} &= \sqrt{5}\times\sqrt{2}-\sqrt{5}\times\sqrt{4}\\ &= \sqrt{5\times 2}-\sqrt{5\times 4}\\ &= \sqrt{10}-\sqrt{20}\\ &= \sqrt{10}-2\sqrt{5}\end{aligned}$$