

159 - EQ - 5.1 Working with Radicals

Q1: Convert the entire radicals to mixed radicals. (1 mark each)

$$\sqrt{50}$$

$$\sqrt{2 \cdot 5^2}$$

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

$$50$$

$$\begin{array}{c} \textcircled{2} \wedge 25 \\ \textcircled{5} \textcircled{5} \end{array}$$

$$\sqrt[3]{40}$$

$$\sqrt[3]{2^3 \cdot 5}$$

$$\boxed{2\sqrt[3]{5}}$$

$$40$$

$$\begin{array}{c} \textcircled{2} \wedge 20 \\ \textcircled{2} \wedge 10 \\ \textcircled{2} \textcircled{5} \end{array}$$

Q2: Simplify the following expressions. (2 marks)

$$\sqrt{50} + \sqrt{18} - \sqrt{20}$$

$$\sqrt{2 \cdot 5^2} + \sqrt{2 \cdot 3^2} - \sqrt{2^2 \cdot 5}$$

$$5\sqrt{2} + 3\sqrt{2} - 2\sqrt{5}$$

$$\boxed{8\sqrt{2} - 2\sqrt{5}}$$

$$50$$

$$\begin{array}{c} \textcircled{2} \wedge 25 \\ \textcircled{5} \textcircled{5} \end{array}$$

$$18$$

$$\begin{array}{c} \textcircled{2} \wedge 9 \\ \textcircled{3} \textcircled{3} \end{array}$$

$$20$$

$$\begin{array}{c} \textcircled{2} \wedge 10 \\ \textcircled{2} \textcircled{5} \end{array}$$

MARKING:

Beginning	0.0 - 1.5
Progressing	2.0 - 2.5
Competent	3.0 - 3.5
Exemplary	4.0