(a) Write $\sqrt{28} + \sqrt{63}$ in the form $p\sqrt{7}$, where p is an integer.

(2)

(b) Simplify $\dfrac{30}{\sqrt{5}}$ by rationalising the denominator.

(2)

(a)   Write $\sqrt{28} + \sqrt{63}$ in the form $p\sqrt{7}$, where p is an integer.

$$= \sqrt{4 \times 7} + \sqrt{9 \times 7}$$

$$= 2\sqrt{7} + 3\sqrt{7}$$

$$= 5\sqrt{7}$$

(2)

(b)   Simplify $\dfrac{30}{\sqrt{5}}$ by rationalising the denominator.

$$\frac{30}{\sqrt{5}} = \frac{30}{\sqrt{5}} \times \frac{\sqrt{5}}{\sqrt{5}} = \frac{30\sqrt{5}}{5} = 6\sqrt{5}$$

(2)