

# Surds Homework

Expand and Simplify where Possible

$$1) (5 + \sqrt{7})(4 + \sqrt{7})$$

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

$$3) (2 + 3\sqrt{2})(1 + \sqrt{2})$$

$$4) (5 + 2\sqrt{3})(4 + 3\sqrt{3})$$

$$5) (6 - 2\sqrt{5})(3 - \sqrt{5})$$

$$6) (4 - 3\sqrt{7})(2 + 5\sqrt{7})$$

$$7) (3 + 2\sqrt{2})(2 + 3\sqrt{3})$$

Rationalise the Denominator

$$8) \frac{20}{\sqrt{5}}$$

$$9) \frac{11}{4 + \sqrt{5}}$$

$$10) \frac{3 + \sqrt{2}}{5 - \sqrt{2}}$$