

**21st February**

Corbettmaths

Expand and simplify fully

$$(2 + 3\sqrt{7})(10 - \sqrt{7})$$

Solve the inequality

$$-x^2 + 3x + 10 > 0$$

$$f(x) = 3x^3 + 11x^2 + 8x - 4$$

Use factor theorem to show that  $(3x - 1)$  is a factor of  $f(x)$ Factorise  $f(x)$  fully

Solve  $\tan^2\theta = 4$

for  $0^\circ < \theta < 360^\circ$