

**21st October**

Corbettmaths

Rationalise and simplify  $\frac{\sqrt{5} - 7}{\sqrt{5} + 1}$

Solve  $\frac{2}{x^2} + \frac{13}{x} + 6 = 0$

The line  $l$  is a tangent to the circle  $(x + 2)^2 + (y + 1)^2 = 20$  at the point  $P$ .

$P$  is the point  $(-6, 1)$

Work out the equation of the line  $l$

Find the range of values of  $x$  for which the function

$$f(x) = 3 + 10x - 8x^2$$

is increasing.