

**17th April**

Corbettmaths

Simplify

$$\frac{\sqrt{700} - \sqrt{28}}{\sqrt{112}}$$

Solve the simultaneous equations

$$x^2 + y^2 = 13$$

$$x + y = 1$$

AB is a diameter of a circle C.  
Q is the centre of the circle  
A has coordinates  $(-7, 1)$  and B has coordinates  $(1, 7)$

Find the centre of the circle, Q.

Find the equation of the tangent to C at the point B

P is a point on the curve  $y = x^2 - 7x$ 

The tangent to the curve at P has gradient 1.

Work out the coordinates of P.