

8th Dec



Corbettmaths

Express  $x^2 + 10x + 3$   
in the form  $(x + a)^2 + b$

Find

$$\sum_{r=1}^{20} (4r + 5)$$

Solve

$$\begin{aligned}x^2 - y^2 &= 2 \\ y + 1 &= x\end{aligned}$$

$$f(x) = 20 + 8x - x^2$$

Find the maximum values of  $f(x)$ 

The curve C has equation  $y = f(x)$   
where

$$f'(x) = 1 + \frac{4}{\sqrt{x}}$$

Given  $y = 2x + 1$  is the tangent to C at  
the point P, find the equation of C.