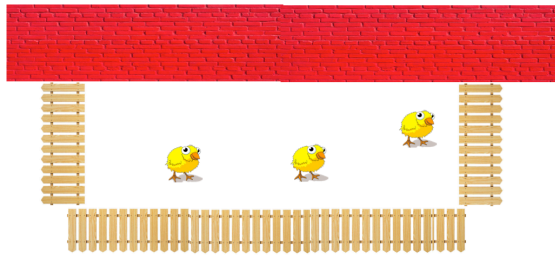


10th March

Corbettmaths

$f(x) = 12 - 3x$ has domain $-3 \leq x \leq 10$

Work out the range of $f(x)$



Rachel makes a rectangular pen for her chickens.
One side of the pen is a brick wall and the other three sides are made using 30 metres of wooden fencing.

The width of the pen is x metres.

Show the area is given by

$$A = 30x - 2x^2$$

Using differentiation, find the maximum value of A .

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