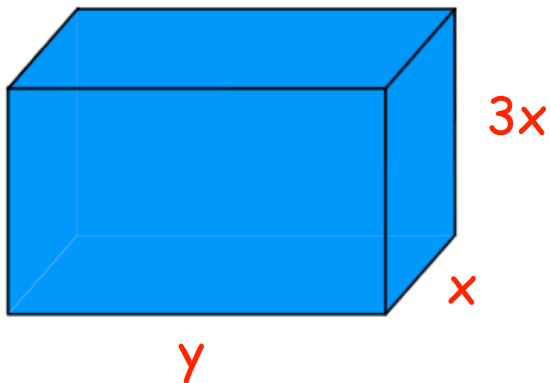**21st May**

Make h the subject of

$$m = 20 + (h - 7)^2$$

AB is a diameter of a circle C.
Q is the centre of the circle
A has coordinates (–7, 14) and B has coordinates (3, 2)

Find the centre of the circle, Q

Find the equation of C

3x

x

y

The surface area of the cuboid is $240cm^2$

Show that the volume of the cuboid is

$$V = 90x - \frac{9}{4}x^3$$

Use differentiation to find the value of x for which V is a maximum