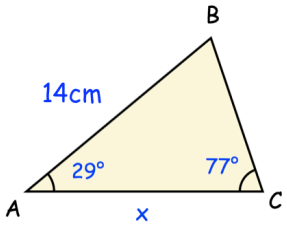
Name: _____ 5-a-day Further Maths

4th February

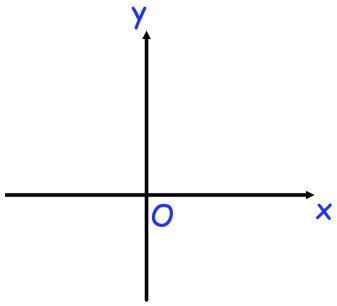
Corbettmaths



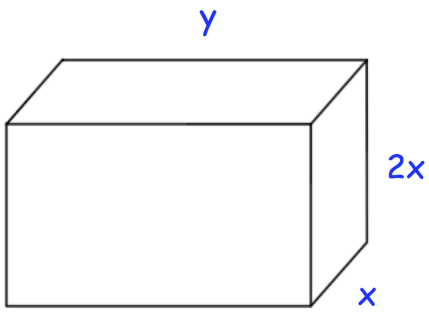
Find the length of the side AC.

Sketch the graph of $y = 200 \times 2^{-x}$

Label the coordinates of any points of intersection with the coordinate axes.



Shown below is a cuboid.



The surface area of the cuboid is 120cm².

The volume of the cuboid is V.

Show that $y = \frac{20}{x} - \frac{2x}{3}$

Show that $V = 40x - \frac{4}{3}x^3$

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