

9th August

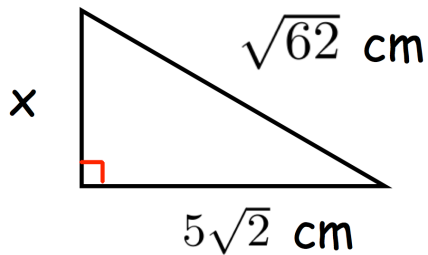
Corbettmaths

The first five terms of a sequence are shown below.

-18, -31, -50, -75, -106

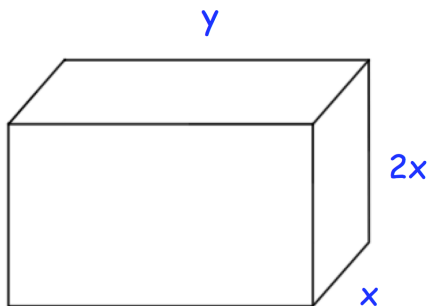
Work out an expression for the n th term of the sequence

Shown below is a right angled triangle.



Find the length of the side labelled x .

Shown below is a cuboid.



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

The surface area of the cuboid is 120cm^2 .

The volume of the cuboid is V .

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

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