

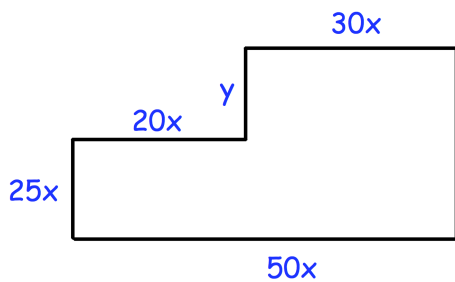
30th October

Corbettmaths

The point C has coordinates $(-5, 4)$
 The point D has coordinates $(6, 1)$
 The point E has coordinates $(9, -13)$

The midpoint of CE is H
 The midpoint of DE is I

Work out the distance between the points H and I



The perimeter of this shape is 300cm

The area of the shape is $A\text{cm}^2$

Show that $y = 150 - 75x$

Show that $A = 4500x - 1000x^2$

Use differentiation to work out the maximum value of A as x varies.