

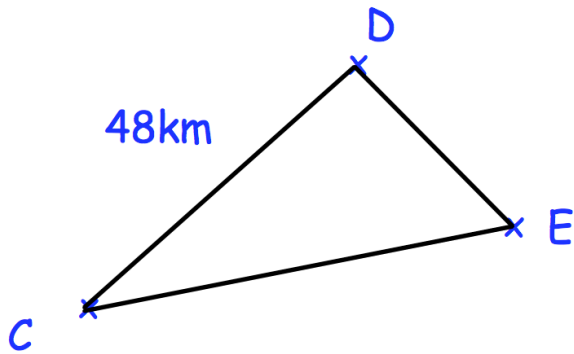
**23rd September**

Corbettmaths

A curve has gradient function

$$\frac{dy}{dx} = 3x^2 - 7$$

Work out the values of  $x$  for which the rate of change of  $y$  with respect to  $x$  is 5



Donhampton is 48km from Castletown on a bearing of  $067^\circ$ .

Eastville is on a bearing of  $084^\circ$  from Castletown and on a bearing of  $150^\circ$  from Donhampton.

Calculate the distance of Eastville from Castletown.

George has the six number cards below.



How many 4-digit **even** numbers can be made that are greater than 5000?