

**31st August**

Corbettmaths

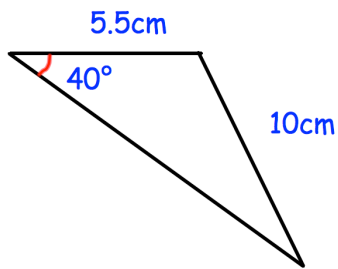
C has coordinates  $(-6, 2)$   
D has coordinates  $(-2, -6)$   
E has coordinates  $(1, 3)$

Find the equation of the line perpendicular to CD and passing through E.

Give your answer in the form  $ax + by + c = 0$ , where a, b and c are integers.

The speed limit on a road is 50km/h  
It took Sam 60 seconds, correct to the nearest 5 seconds, to drive along a road that is 780m long, correct to 2 significant figures.

Could Sam have broken the speed limit?



Calculate the area of the triangle

Find the coordinates of the points where the line  $x + 5y = 37$  and the curve  $y = x^2 + x + 2$  meet.

Prove  $(4n + 1)^2 - (2n - 1)$  is an even number for all positive integers values of n.