Name: _____ 5-a-day Core 1

11th March

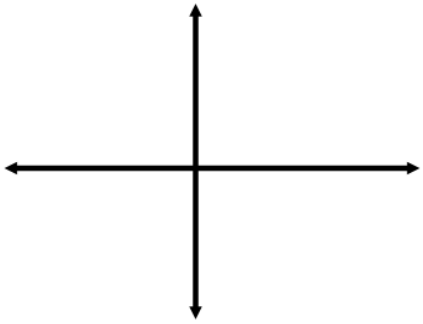
Corbettmaths

Find the set of values of x that satisfies both

$5(x + 3) < 3 - x$
and
$2x^2 - 17x - 30 \geq 0$

Sketch
$y = x^2(x + 4)$

showing the coordinates where the curve meets the axes.



The line L1 has equation $y = 3x - 2$
The line L2 is perpendicular to L1 and passes through the point $(5, -1)$

Find the equation of L2 in the form
$y = mx + c$

The lines L1 and L2 intersect at the point C.

Find the coordinates of C.

The lines L1 and L2 cross the x-axis at the points A and B respectively.

Calculate the area of triangle ABC.