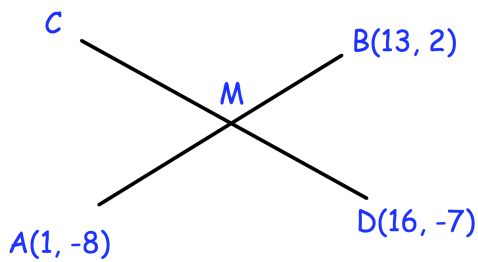


17th March

Lines AB and CD bisect each other at M.

Work out the coordinates of C.

Using completing the square, write down the coordinates of the minimum point on the curve

$$y = x^2 - 8x - 11$$

Find the range of values of x that satisfies both

$$x^2 > 3 \quad \text{and} \quad \frac{3x}{2} > -10$$

A curve has equation

$$y = \frac{5}{2}x^2 + 12x$$

Work out the equation of the normal to the curve at the point $(-0.5, -5.375)$

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