

**24th April**

Corbettmaths

The points A and B have coordinates (6, 6) and (-5, -8) respectively.

The straight line L1 is perpendicular to AB and passes through the origin.

Find the equation of L1 in the form  $ax + by + c = 0$

Solve the simultaneous equations

$$x = 3y - 1$$

$$x^2 - 3xy + y^2 = 5$$

The sum of the first 11 terms of an arithmetic series is 55.

The 13th term is -16.

Find a and d.

Find the equation of the normal to the curve with equation  $y = x^3 - 2x$  at the point (1, -1)

$$\int (3x^5 + 2) dx$$