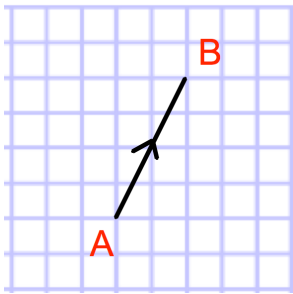


6th November

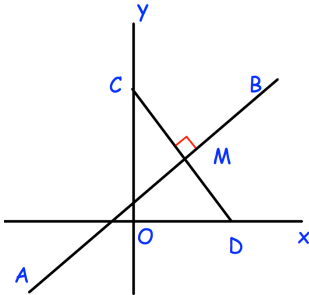


Corbettmaths



$$\vec{AB} = \begin{pmatrix} 2 \\ 4 \end{pmatrix}$$

Write down a vector that is perpendicular to AB and the same length



Find the equation of AB

Shown are the straight lines AB and CD.

M is the midpoint of CD

AB is perpendicular to CD and passes through the point M

C is the point (0, 12) and D is the point (6, 0)

B is the point (11, 10)

AM:MB = 5:2

Find the coordinates of the point A

A bag contains 15 sweets.  
9 sweets are red.  
4 sweets are yellow.  
2 sweets are green.  
Two sweets are taken from the bag without replacement.

Work out the probability that the two sweets are same colour.

Solve the simultaneous equations

$$x - 7 = 2y$$

$$x^2 + 4y^2 = 37$$