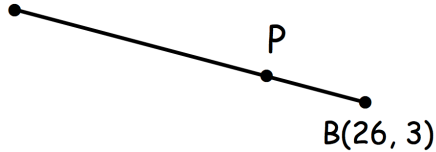


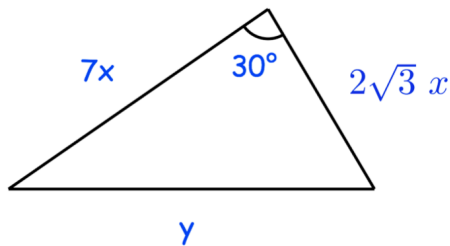
 $A(-2, 10)$ 

APB is a straight line.

AP:PB = 5:2

Work out the coordinates of point P.

Write down the equation of the tangent to the circle  $x^2 + y^2 = 25$  at the point (3, 4)



Express  $y$  in terms of  $x$

Mr Kelly has two pots of pens.  
In pot 1, there are 5 black and 3 green pens.  
In pot 2, there are 2 black and 2 green pens.

Mr Kelly removes 3 pens at random from pot 1 and places them into pot 2.

Mr Kelly now removes 2 pens at random from pot 2 and places them in pot 1.

What is the probability that pot 1 now holds 7 black pens and pot 2 holds 5 green pens?