

Simplify  $\sqrt{200}$ 

$$\sqrt{100} \times \sqrt{2}$$

$$10\sqrt{2}$$

Given that  $x : y = 5 : 11$ and  $y - x = 90$   $y = x + 90$ Find the value of  $2x + y$ 

$$150 + 165 = 315$$

$$11x = 5y$$

$$11x = 5(x + 90)$$

$$11x = 5x + 450$$

$$6x = 450$$

$$x = 75$$

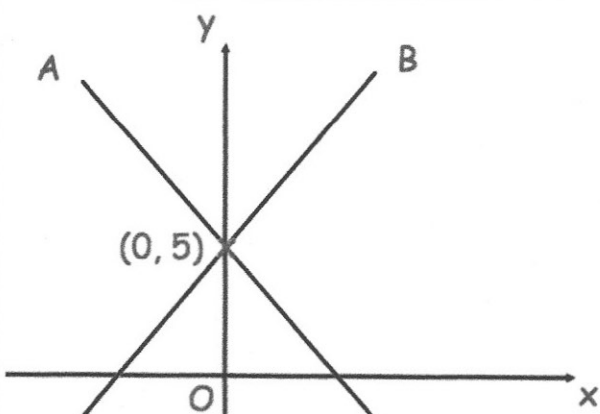
$$y = 165$$

There are 12 sweets in a bag  
7 are lemon and 5 are orange.Two sweets are taken out of the bag, at  
random, without replacement.Find the probability that the two sweets  
are the same flavour.

$$P(LL) = \frac{7}{12} \times \frac{6}{11} = \frac{42}{132}$$

$$P(OO) = \frac{5}{12} \times \frac{4}{11} = \frac{20}{132}$$

$$\frac{62}{132} = \frac{31}{66}$$



The lines A and B are perpendicular.  
Both lines pass through the point  $(0, 5)$   
The gradient of line A is  $-\frac{3}{4}$

Work out the gradient of line B.

$$\frac{4}{3}$$

Write down the equation of line B

$$y = \frac{4}{3}x + 5$$