M4 =27 days to go!

2 The test scores for the 10 boys in a class are

7 8 5 8 7 9 4 5 3 9

The mean test score for the 5 girls in the class is 8

Girls 8, 8, 8, 8, 8 say!

Calculate the mean for this class.

Show your working clearly.

Mean = add up ÷ 15

$= \frac{65+40}{15}$

$= \frac{105}{15}$

Mean = 7

Does this mean make sense?

12 Find the equation of the line which goes through (0, −4) and is perpendicular to the line $2x + 3y = 9$

$2x + 3y = 9$

$3y = -2x + 9$

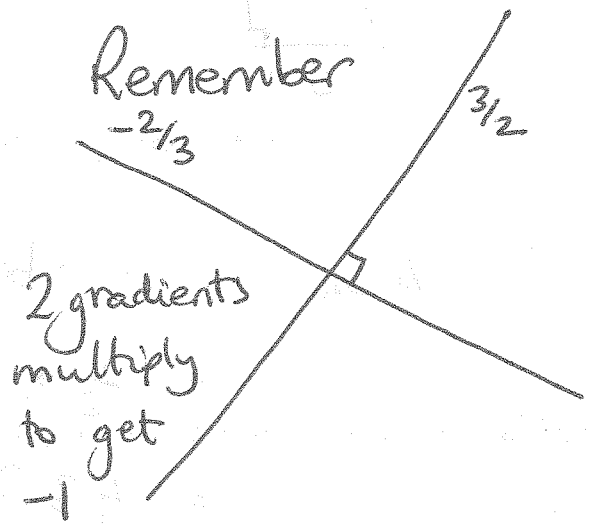
$y = \frac{-2}{3}x + 9$

$y = mx + c$

Equation we want gradient is $\frac{3}{2}$

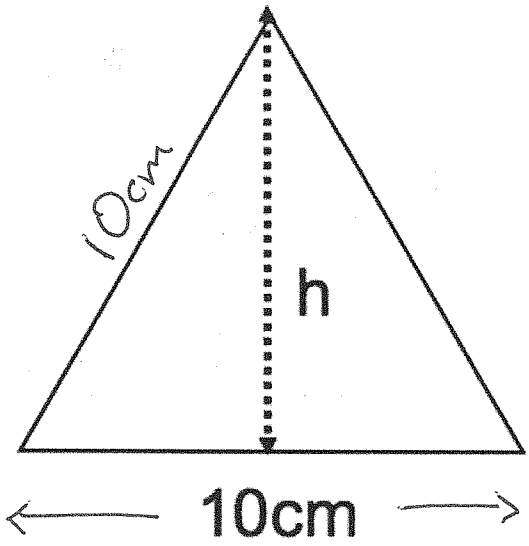
$y = \frac{3}{2}x + c$

$y = \frac{3}{2}x + -4$

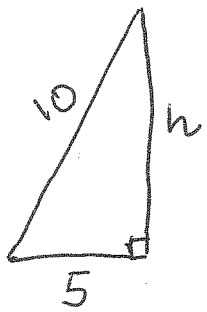


Answer $y = \frac{3}{2}x - 4$ [3]

12. Below is an equilateral triangle



(a) Calculate the height of the triangle.



Pythagoras'

$10^2 = h^2 + 5^2$

$100 = h^2 + 25$

$75 = h^2$

$h = \sqrt{75}$

$h = 8.66$ cm

(b) Calculate the area of the triangle.

Area is $\frac{1}{2} \times$ base $\times$ height

$= \frac{1}{2} \times 10 \times 8.66$

$= 43.3$

Ans $43.3\ cm^2$