

S3 Credit - Homework 2

Non-calculator section:

1. Find (a) $21.4 - 8.6 \div 4$ (b) 65% of £32 (c) 0.061×40 (d) $\frac{3}{4}$ of 18 kg

2. $P = 2x^2 - 3xy$. Calculate P when $x = -4$ and $y = -2$

3. A line has equation $y = 3x - 4$.

(a) Copy and complete the table below.

x	3	-1	1
y			

(b) Draw this line on a graph.

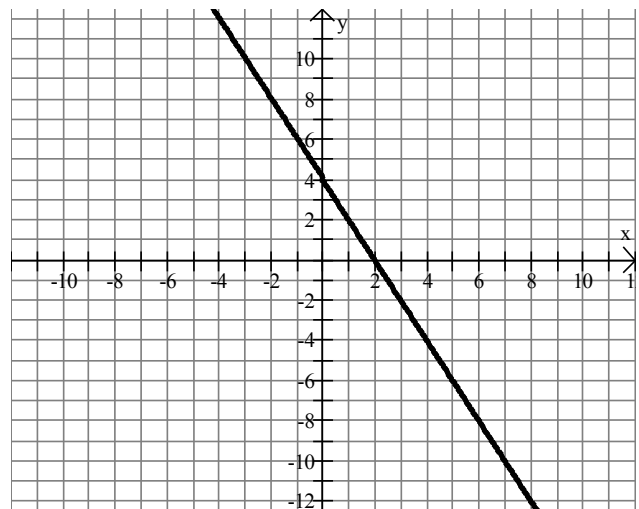
(c) Write down the gradient of the line $y = 3x - 4$

4. Expand the brackets and simplify

(a) $5(2m - n) - 3(m + 2n)$

(b) $(x - 2)(x^2 + 2x - 1)$

5. Find the equation of the line opposite.



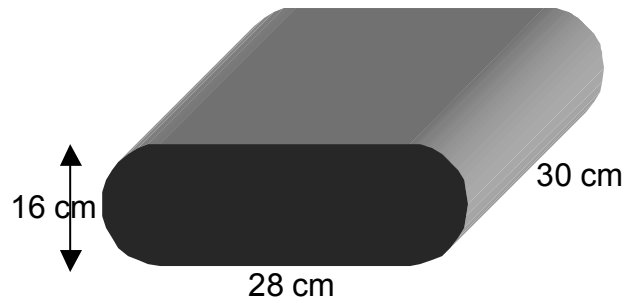
Calculator section:

6. (a) In a survey of 2400 people, 35% went abroad on holiday in 2005. How many people went abroad in 2005?

(b) 12.5% of those who went abroad visited Florida. How many went to Florida?

7. The cross-section of the shape opposite consists of a rectangle with semi-circular ends.

Calculate the volume of this shape.



8. A formula is given as $T = \frac{u(u + 3v)}{v^2}$. Find T when $u = 9$ and $v = 1.5$

9. The diagram opposite shows a flagpole. The flagpole is connected to the ground by a metal wire 11 metres long.

Calculate the height of the flagpole.

