

S3 Credit – Homework 3

Non-calculator section:

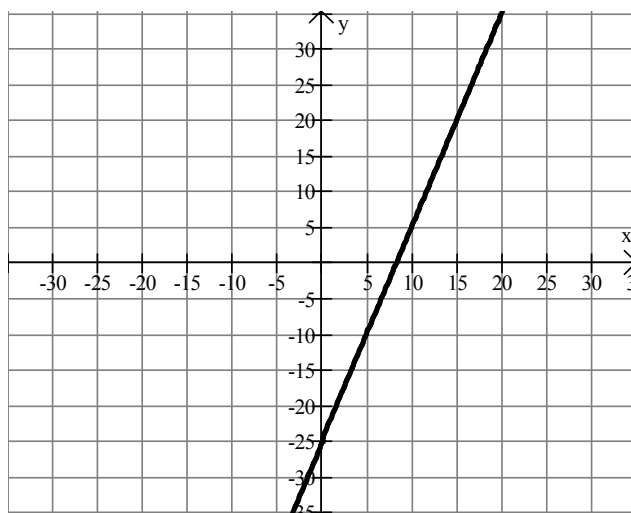
1. Find (a) $21.3 - 4 \times 3.45$ (b) $27 \div 60$ (c) $\frac{5}{8}$ of £34

2. $T = 3ac - c^2$. Find t when $a = -5$ and $c = -3$.

3. Expand the brackets and simplify

(a) $5(x - 3) - 2(x - 5)$ (b) $(2a - 3c)^2$

4. Find the equation of the line below.



5. Solve (a) $3(2x - 4) > 6$ (b) $4(2n + 1) = 5n - 5$

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

(a) Copy and complete the table below.

x	3	-1	0
y			

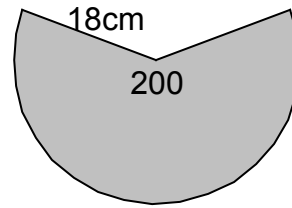
(b) Show this line on a graph.

(c) Write down the gradient of this line.

Calculator section:

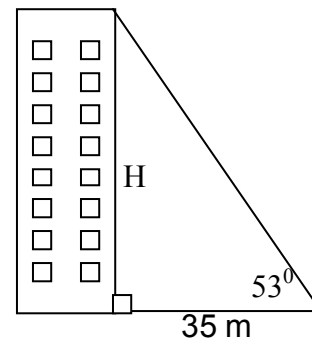
7. A computer costs £1200 cash. It can also be bought on credit at a deposit of 15% plus monthly payments over 2 years of £49.95.
Find the difference between the cash price and the credit price.

8. The sector opposite has radius 18 cm.
Calculate its area.

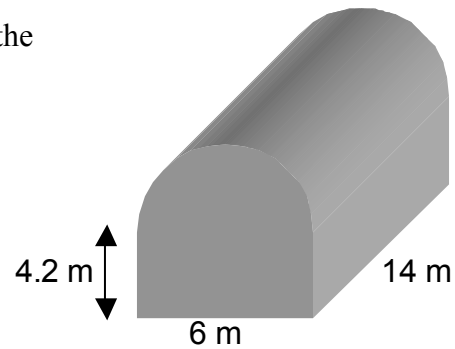


9. A formula is given as $P = \frac{a^2(a - 2c)}{c^2}$. Find P when a = 15 and c = 5.

10. From a distance of 35 metres the angle of elevation to the top of a block of flats is 53° .
Calculate, H, the height of the flats.



11. The shape opposite has a cross-section in the form of a rectangle and a semi-circle.
Calculate its area.



12. The diagonals of a rhombus are 42 cm and 60 cm in length.

Calculate, x, the length of the side of the rhombus.

