



Air maths tuition

Interact, engage and perform

Quadratic Inequalities | Past Paper Question | C1 OCR January 2012 Q9(i)(ii)

(i) Sketch the curve $y = 12 - x - x^2$, giving the coordinates of all intercepts with the axes.

(ii) Solve the inequality $12 - x - x^2 > 0$.

i) $y = 12 - x - x^2$

when $x = 0$, $y = 12$

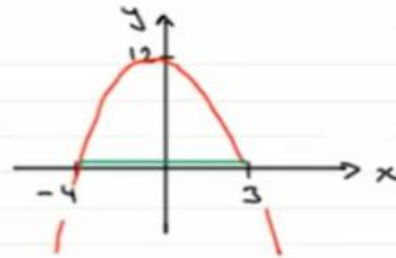
when $y = 0$, $12 - x - x^2 = 0$

$$\therefore x^2 + x - 12 = 0$$

$$\therefore (x + 4)(x - 3) = 0$$

$$\therefore x + 4 = 0 \text{ or } x - 3 = 0$$

$$\therefore x = -4 \text{ or } x = 3$$



ii) from the graph

$$12 - x - x^2 > 0$$

$$\therefore -4 < x < 3$$

With the acknowledgement of [Exam Solutions](#).
Find lots more revision sheets on [Air Maths Tuition](#).

[This Video](#)



Exam Solutions

maths made easy