

# K Education Centre

## GCSE Maths - Higher

Quadratic Graphs

Assignment Questions

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## Quadratic Graphs

Q1 : Solve simultaneous equations  $y = x^2 + 2x + 3$  and  $y = x - 1$  graphically. ( $-5 \leq x \leq 5$ )

Q2: Draw the graph of  $y = x^2 - 8x - 10$

Use this graph to solve the equation  $x^2 - 8x - 10 = 5$

Q3: Use the graphical method to find the solutions of

$$x^2 + y^2 = 4$$

And  $y = x + 1$

Q4 : Solve these pairs of equations algebraically.

$$x^2 + y^2 = 9$$

$$y = x + 3$$

Q5 : Given that  $x^2 + y^2 = 185$  and that  $y = 6x - 37$ . Show that

$$x^2 - 12x + 32 = 0$$