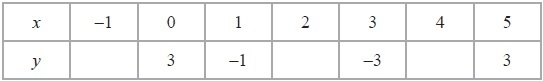
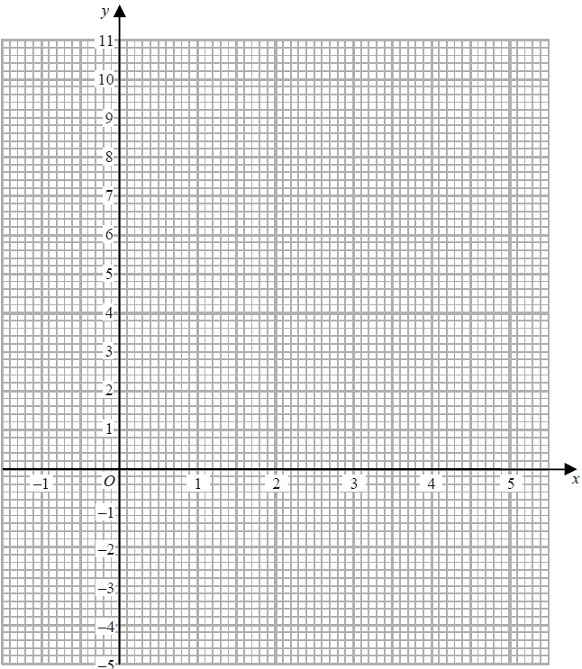
**Parabolas, Roots and Turning Points GREEN**

1. a)   Complete the table of values for y = x2 − 5x + 3



b)   On the grid below, draw the graph of y = x2 − 5x + 3 for values of x from x = −1 to x = 5



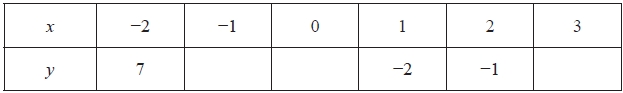
c)   Find estimates of the solutions of the equation x2 − 5x + 3 = 0

x = ………………… or …………………

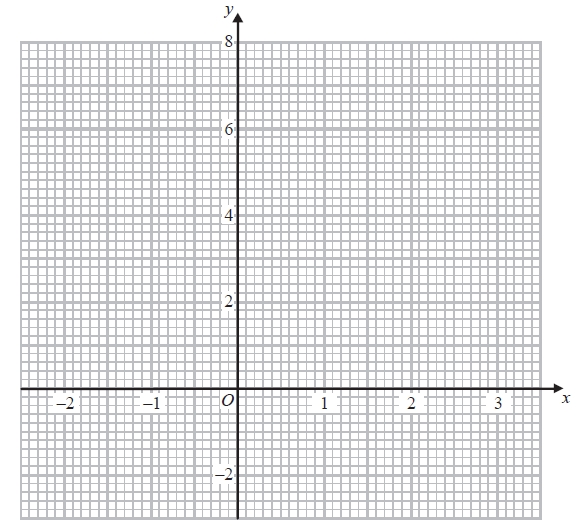
d) Identify the turning point of y = x2 − 5x + 3

(…………………, …………………)

2. a) Complete the table of values for y = x2 − 2x − 1



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from x = −2 = 3



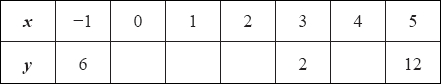
c) Find estimates for the solutions of the equation x2 − 2x − 1 = x + 3

x = ………………… or …………………

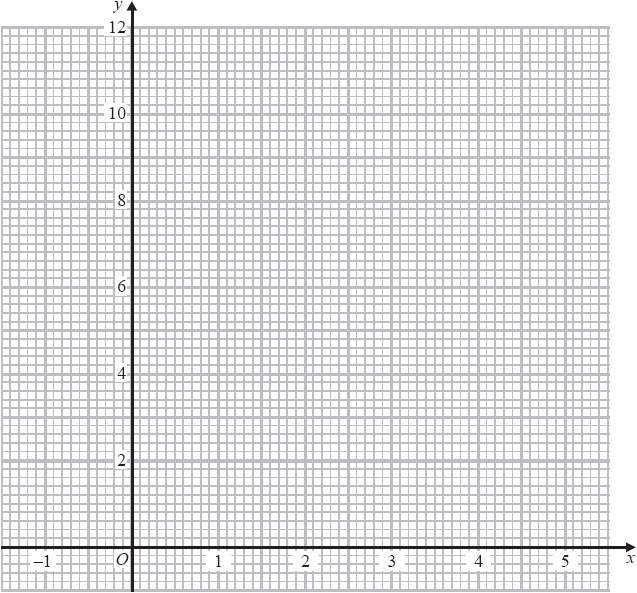
d) Identify the turning point of y = x2 − 2x − 1

(…………………, …………………)

3. a)   Complete the table of values for y = x2 – 3x + 2



b)   On the grid, draw the graph of y = x2 – 3x + 2 for values of x from –1 to 5



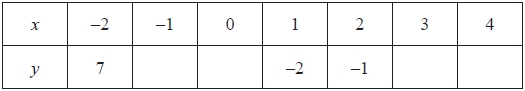
c)   Find estimates for the solutions of the equation x2 – 3x + 2 = 4

x = ………………… or …………………

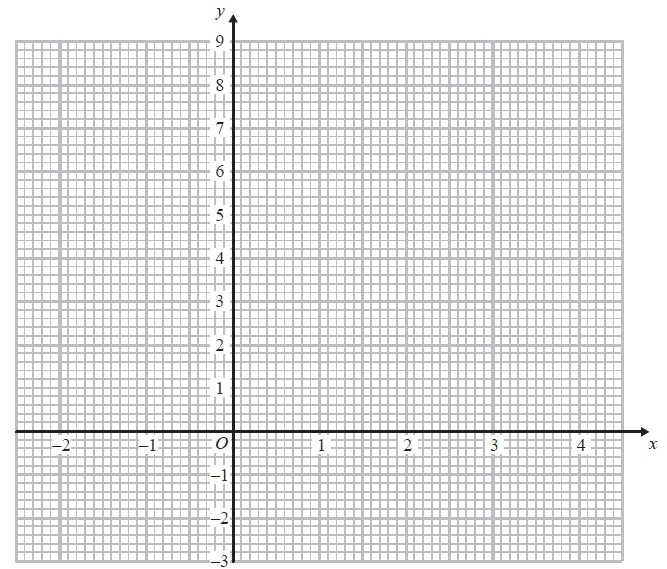
d) Identify the turning point of y = x2 – 3x + 2

(…………………, …………………)

4. a) Complete the table of values for y = x2 − 2x − 1



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from −2 to 4



c) Solve x2 − 2x − 1 = 2x

x = ………………… or …………………

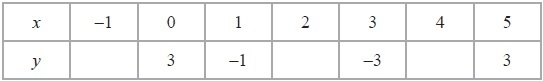
d) Identify the turning point of y = x2 – 3x + 2

(…………………, …………………)

**Parabolas, Roots and Turning Points AMBER**

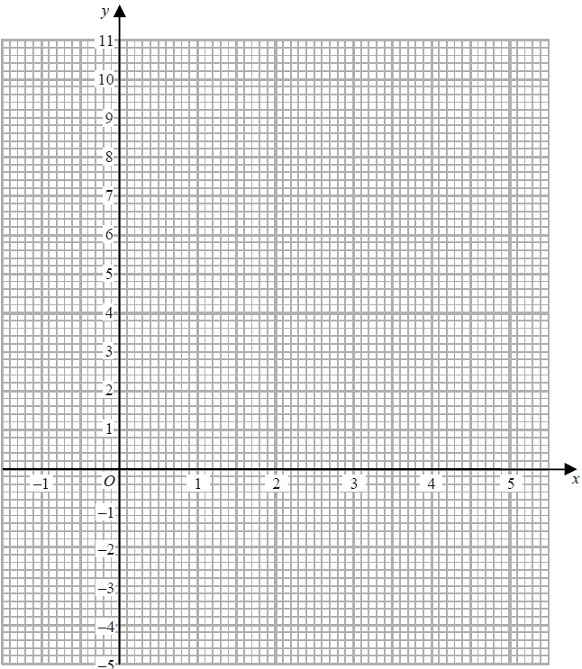
1. a)   Complete the table of values for y = x2 − 5x + 3

Substitute the x values into the equation to get the y values



b)   On the grid below, draw the graph of y = x2 − 5x + 3 for values of x from x = −1 to x = 5

Remember to join the coordinates with a single smooth curve



The equation is equal to 0 so identify the roots of the equation

c)   Find estimates of the solutions of the equation x2 − 5x + 3 = 0

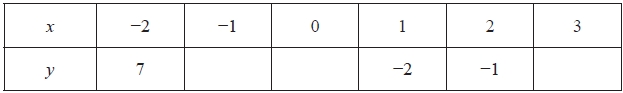
x = ………………… or …………………

d) Identify the turning point of y = x2 − 5x + 3

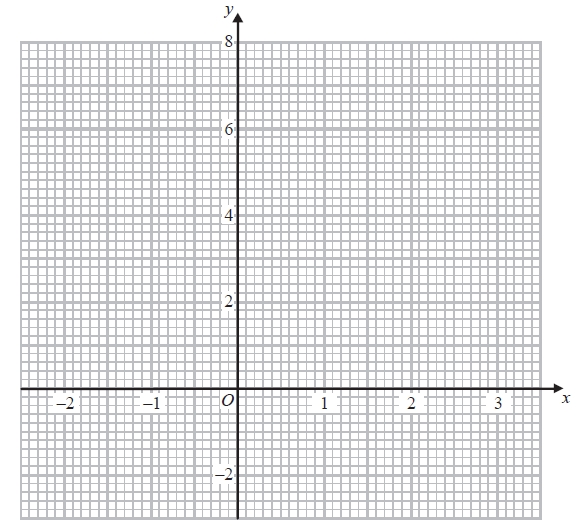
At which coordinate does the graph change direction?

(…………………, …………………)

2. a) Complete the table of values for y = x2 − 2x − 1



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from x = −2 = 3



Sketch the graph of y = x + 3 and identify the x values of the intersection points

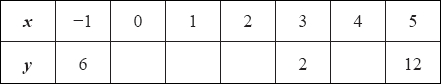
c) Find estimates for the solutions of the equation x2 − 2x − 1 = x + 3

x = ………………… or …………………

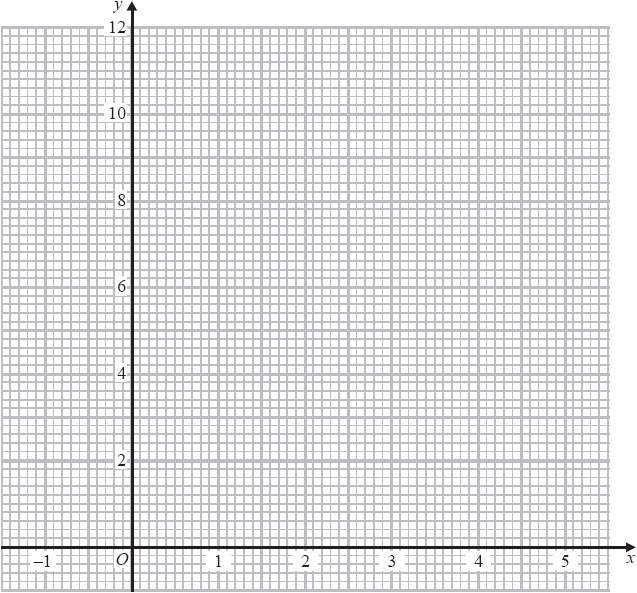
d) Identify the turning point of y = x2 − 2x − 1

(…………………, …………………)

3. a)   Complete the table of values for y = x2 – 3x + 2



b)   On the grid, draw the graph of y = x2 – 3x + 2 for values of x from –1 to 5



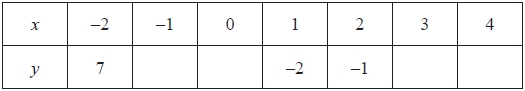
c)   Find estimates for the solutions of the equation x2 – 3x + 2 = 4

x = ………………… or …………………

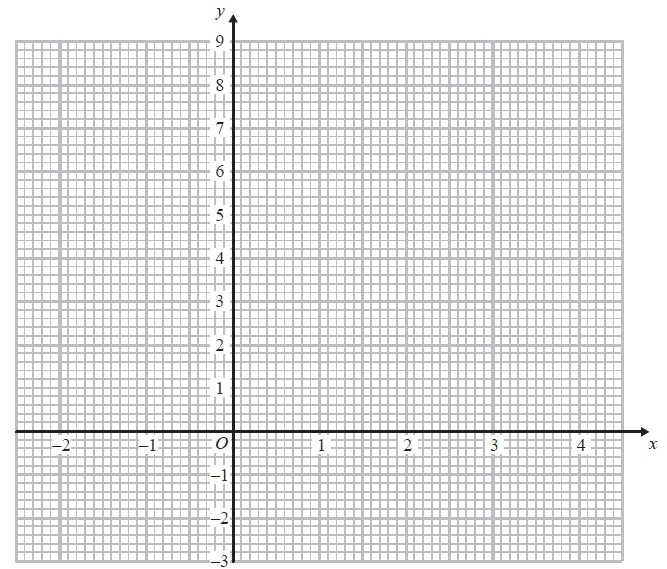
d) Identify the turning point of y = x2 – 3x + 2

(…………………, …………………)

4. a) Complete the table of values for y = x2 − 2x − 1



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from −2 to 4



c) Solve x2 − 2x − 1 = 2x

x = ………………… or …………………

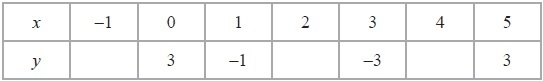
d) Identify the turning point of y = x2 – 3x + 2

(…………………, …………………)

**Parabolas, Roots and Turning Points RED**

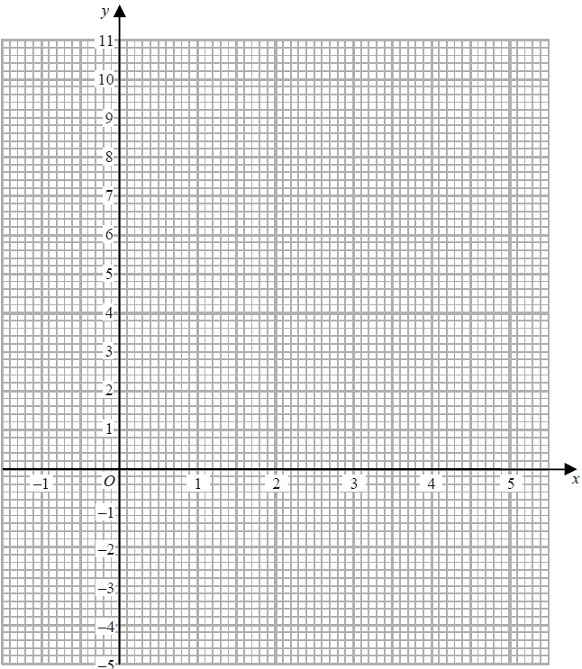
1. a)   Complete the table of values for y = x2 − 5x + 3

Substitute the x values into the equation to get the y values



b)   On the grid below, draw the graph of y = x2 − 5x + 3 for values of x from x = −1 to x = 5

Remember to join the coordinates with a single smooth curve



The equation is equal to 0 so identify the roots of the equation

c)   Find estimates of the solutions of the equation x2 − 5x + 3 = 0

x = ………………… or …………………

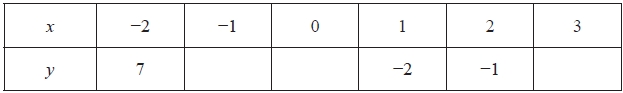
d) Identify the turning point of y = x2 − 5x + 3

At which coordinate does the graph change direction?

(…………………, …………………)

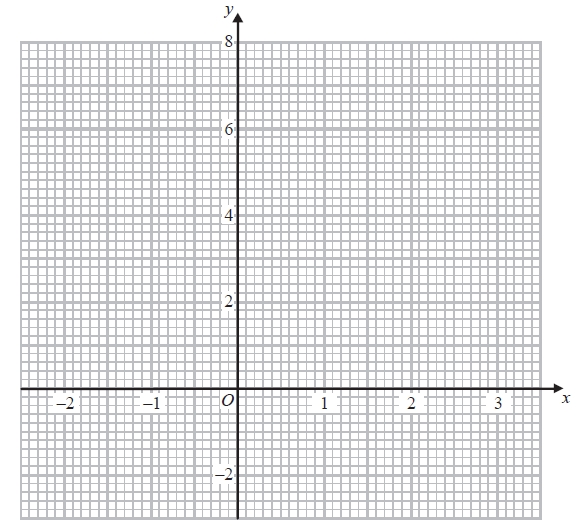
2. a) Complete the table of values for y = x2 − 2x − 1

Substitute the x values into the equation to get the y values



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from x = −2 = 3

Remember to join the coordinates with a single smooth curve



Sketch the graph of y = x + 3 and identify the x values of the intersection points

c) Find estimates for the solutions of the equation x2 − 2x − 1 = x + 3

x = ………………… or …………………

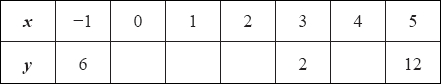
d) Identify the turning point of y = x2 − 2x − 1

At which coordinate does the graph change direction?

(…………………, …………………)

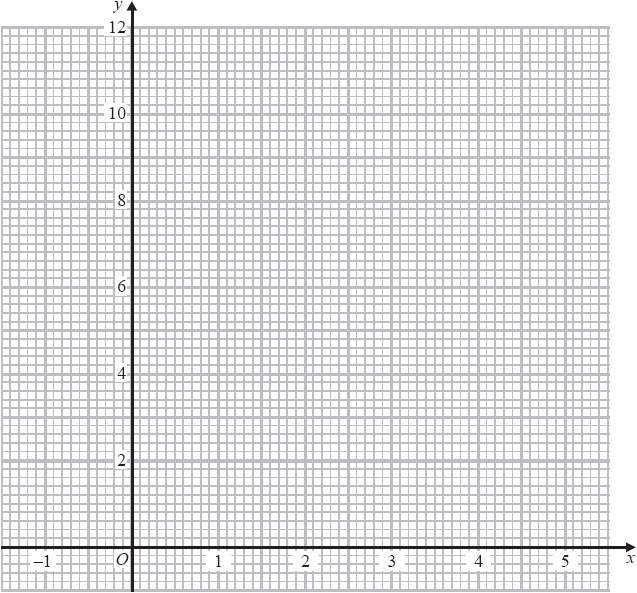
3. a)   Complete the table of values for y = x2 – 3x + 2

Substitute the x values into the equation to get the y values



b)   On the grid, draw the graph of y = x2 – 3x + 2 for values of x from –1 to 5

Remember to join the coordinates with a single smooth curve



Sketch the graph of y = 4 and identify the x values of the intersection points

c)   Find estimates for the solutions of the equation x2 – 3x + 2 = 4

x = ………………… or …………………

d) Identify the turning point of y = x2 – 3x + 2

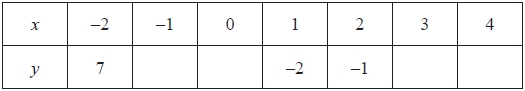
At which coordinate does the graph change direction?

(…………………, …………………)

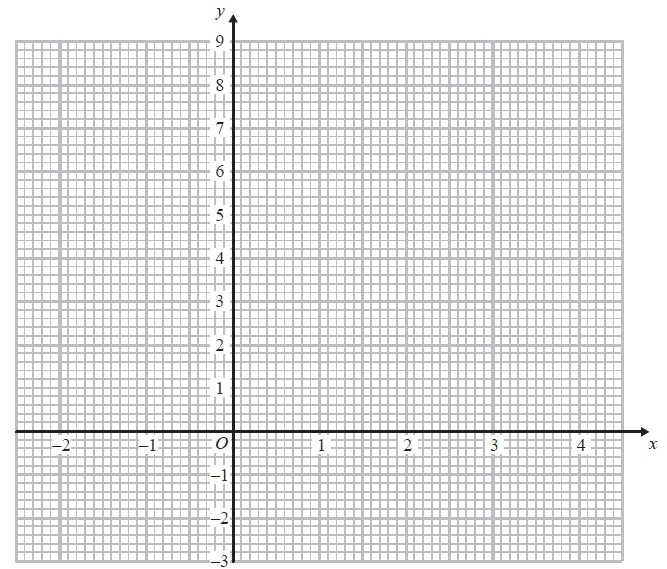
4. a) Complete the table of values for y = x2 − 2x − 1

Substitute the x values into the equation to get the y values

Remember to join the coordinates with a single smooth curve



b) On the grid, draw the graph of y = x2 − 2x − 1 for values of x from −2 to 4



Sketch the graph of y = 2x and identify the x values of the intersection points

c) Solve x2 − 2x − 1 = 2x

x = ………………… or …………………

d) Identify the turning point of y = x2 – 3x + 2

At which coordinate does the graph change direction?

(…………………, …………………)