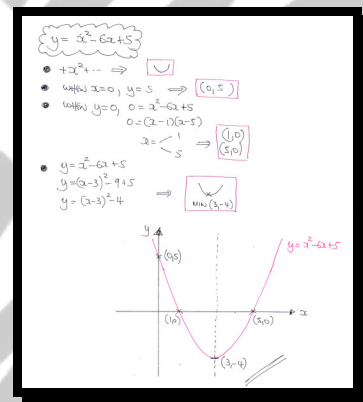# SKETCHING QUADRATICS

Question 1

Sketch the graph of the curve with equation

$$y = x^2 - 6x + 5, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 2
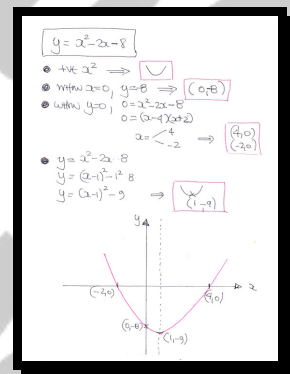
Sketch the graph of the curve with equation

$$y = x^2 - 2x - 8, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 3
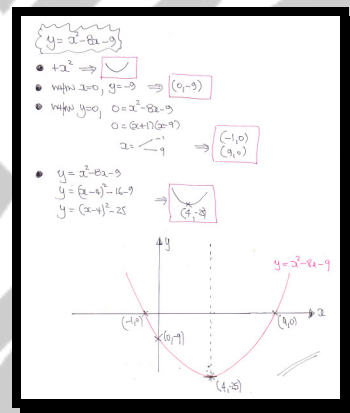
Sketch the graph of the curve with equation

$$y = x^2 - 8x - 9, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 4
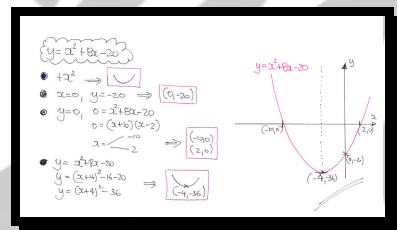
Sketch the graph of the curve with equation

$$y = x^2 + 8x - 20, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 5
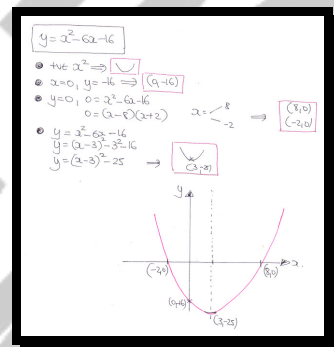
Sketch the graph of the curve with equation

$$y = x^2 - 6x - 16, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 6

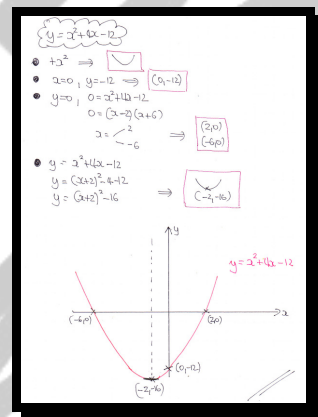Sketch the graph of the curve with equation

$$y = x^2 + 4x - 12, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 7
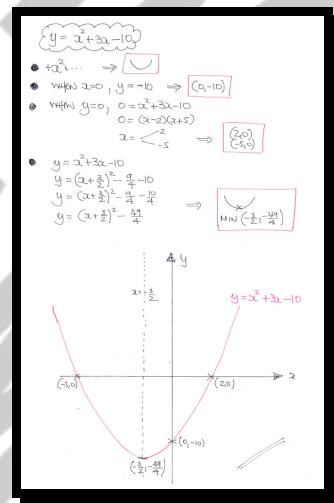
Sketch the graph of the curve with equation

$$y = x^2 + 3x - 10, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 8

Sketch the graph of the curve with equation

$$y = x^2 + 4x + 7, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
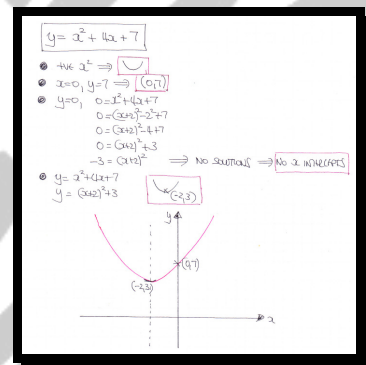- … the minimum point of the curve.

graph

Question 9
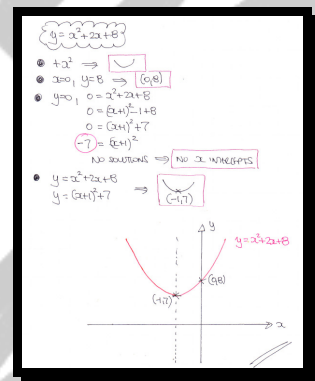
Sketch the graph of the curve with equation

$$y = x^2 + 2x + 8, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 10
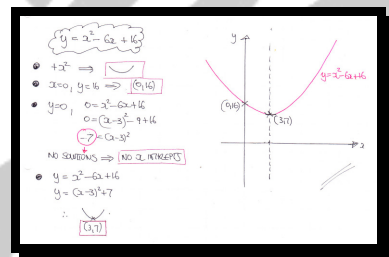
Sketch the graph of the curve with equation

$$y = x^2 - 6x + 16, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the minimum point of the curve.

graph

Question 11

Sketch the graph of the curve with equation

$$y = x^2 - 10x + 25 \,, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
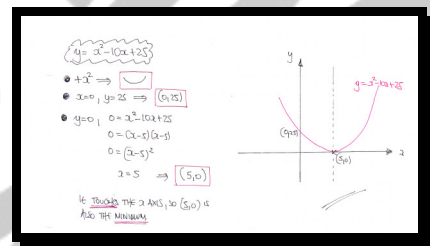- … the minimum point of the curve.

graph

Question 12
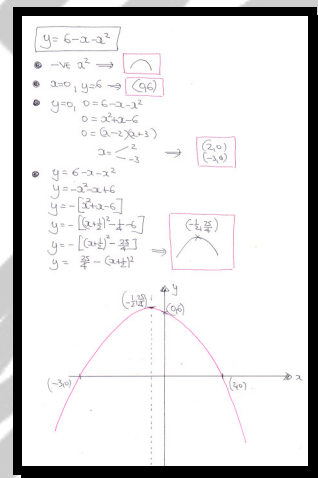
Sketch the graph of the curve with equation

$$y = 6 - x - x^2, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 13
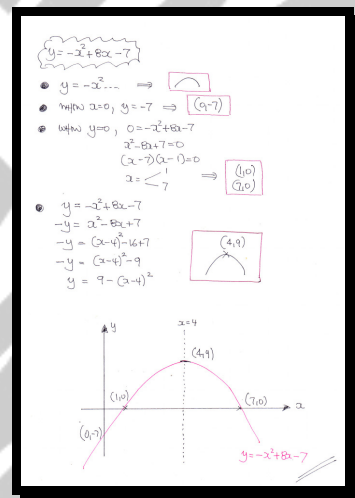
Sketch the graph of the curve with equation

$$y = -x^2 + 8x - 7, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 14
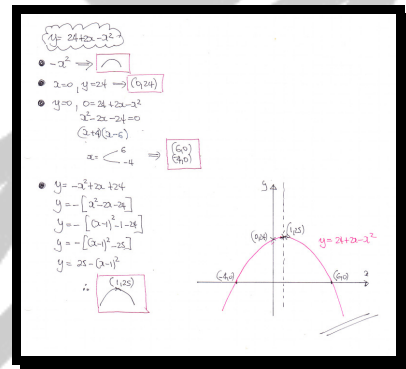
Sketch the graph of the curve with equation

$$y = 24 + 2x - x^2, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 15
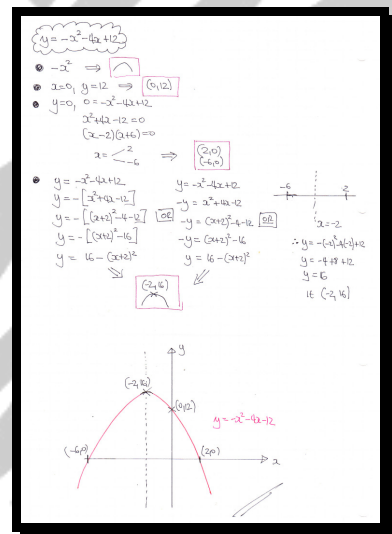
Sketch the graph of the curve with equation

$$y = -x^2 - 4x + 12, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 16
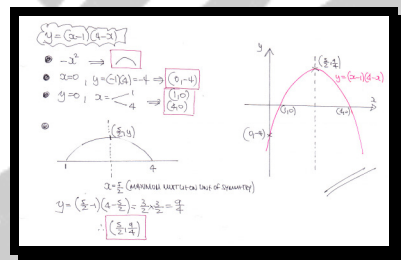
Sketch the graph of the curve with equation

$$y = (x-1)(4-x), \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 17
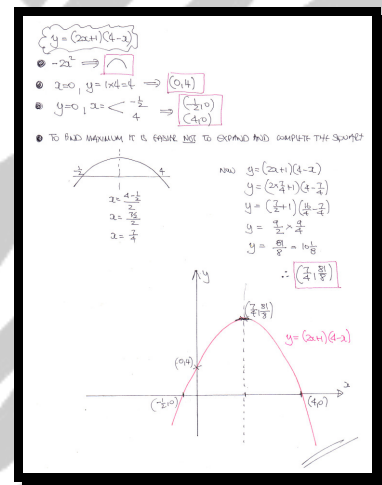
Sketch the graph of the curve with equation

$$y = (2x+1)(4-x), \quad x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph

Question 18

Sketch the graph of the curve with equation

$$y = 2x^2 + 7x - 15, \ x \in \mathbb{R}.$$

The sketch must include the coordinates of …

- … all the points where the curve meets the coordinate axes.
- … the maximum point of the curve.

graph