QUADRATIC GRAPHS

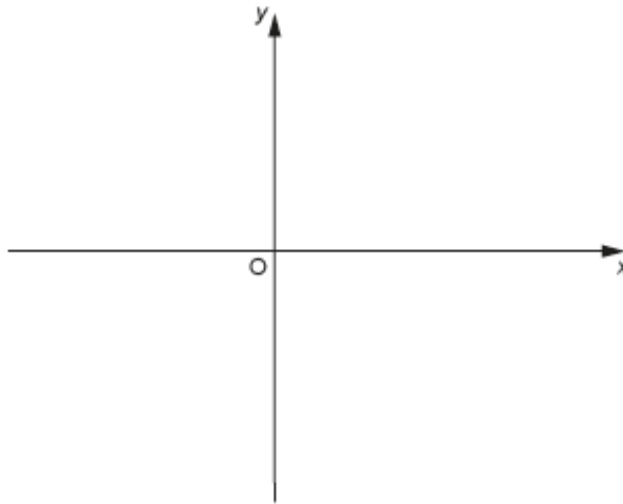**OCR Thursday 07 November 2019- Morning (Non-Calculator) Foundation Tier**

1.

13 (a) (i) Sketch the graph of $y = 2$.

[2]

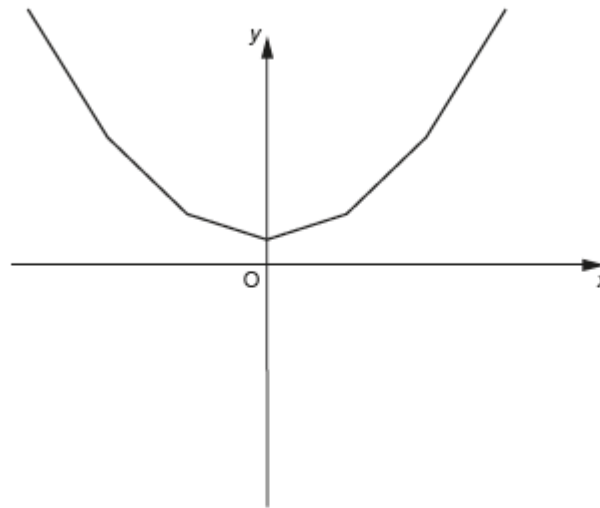(ii) Sketch the graph of $y = x + 1$.

[2]

(iii) Ceri says that the graphs of $y = 2$ and $y = x + 1$ cross at the point $(2, 3)$.

Explain the error in her answer.

....

.... [1]

(b) Oliver has sketched the graph of $y = x^2$ below.

Make two comments about the accuracy of his sketch.

1 ....

....

2 ....

....

[2]

2.

15 (a) Complete this table for $y = x^2 - 5$.

x	-2	-1	0	1	2	3	4
y		-4	-5	-4			11

[2]

(b) On the grid below, draw the graph of $y = x^2 - 5$ for the values of x from -2 to 4.
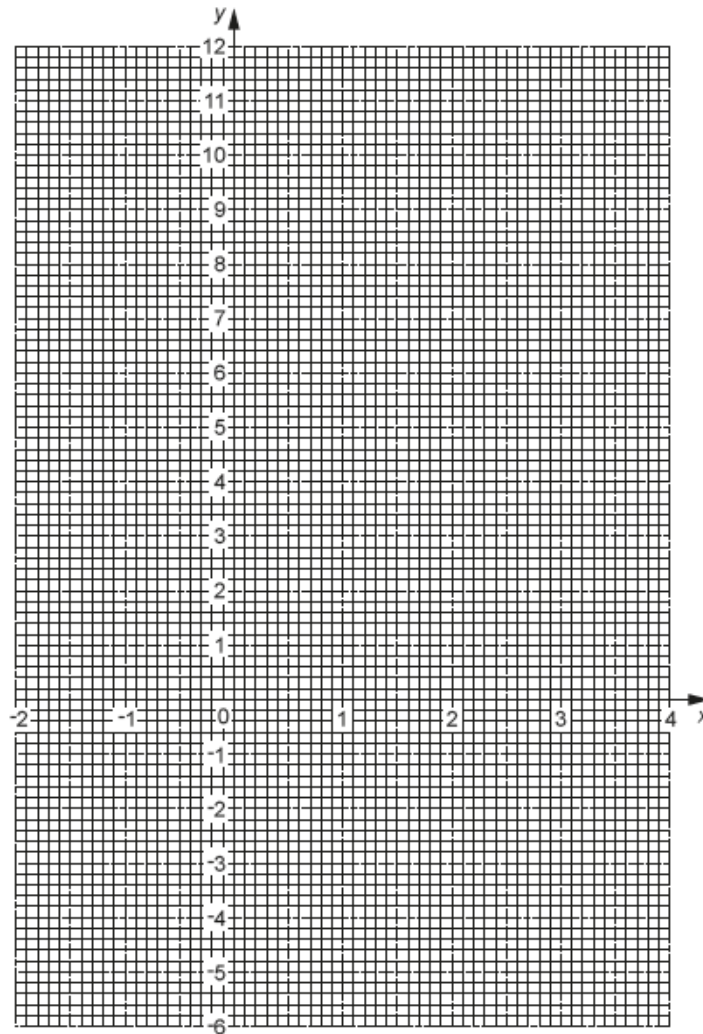
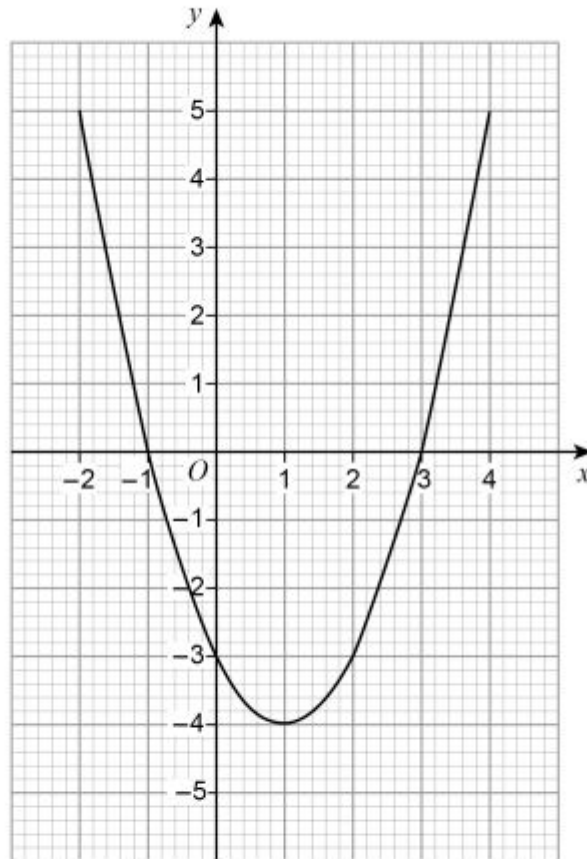[2]

(c) On the same grid, draw the line $y = -2$. [1]

(d) Write down the x coordinates of the points where $y = x^2 - 5$ and $y = -2$ cross.

(d) $x =$ .... and $x =$ .... [2]

3.

26   Here is a quadratic graph.

Circle the x-coordinate of the turning point of the graph.

[1 mark]

−4   −1   1   3