EXAM PAPERS PRACTICE

GCSE AQA Math 8300

Graphs

Question Paper

"We will help you to achieve A Star "

Question 1

y

$\times$ B (7, 5)

Diagram **NOT**
accurately drawn

A (−1, 2) $\times$

O

x
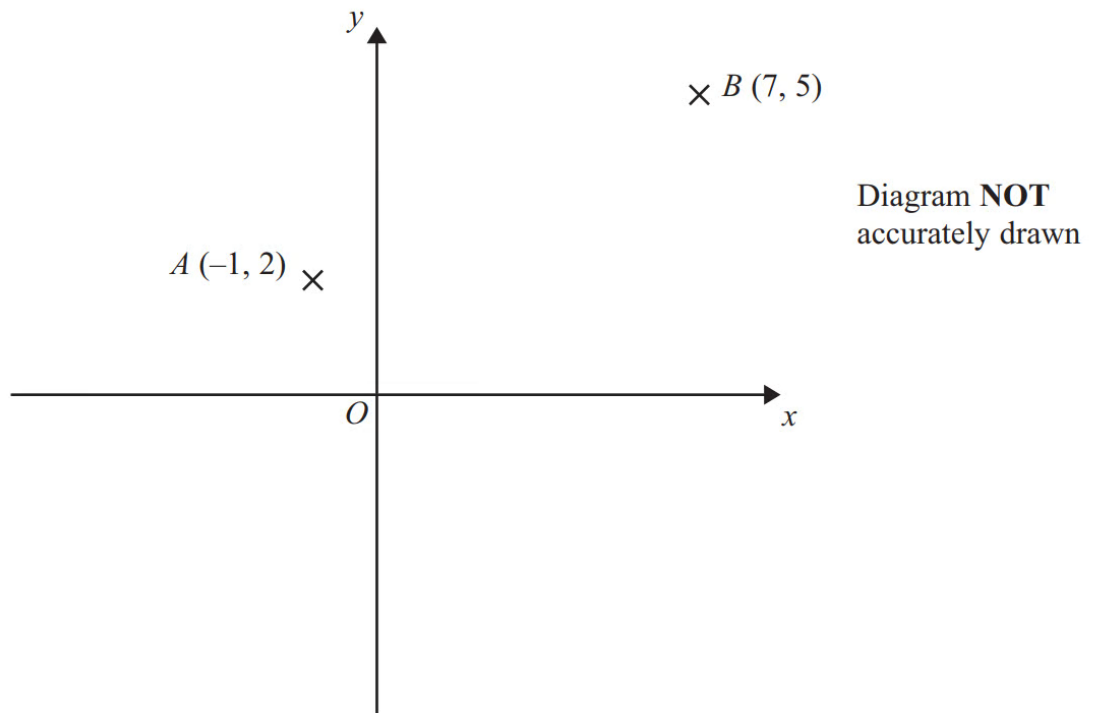
A is the point (−1, 2)
B is the point (7, 5)

(a) Find the coordinates of the midpoint of AB.

[2 marks]

Question 2

AB is a line segment.

A is the point with coordinates (3, 6, 7).
The midpoint of AB has coordinates (−2, 2, 5).

Find the coordinates of B.

[2 marks]

Question 3

The point A has coordinates (2, 3).
The point B has coordinates (6, 8).

M is the midpoint of the line AB.

Find the coordinates of M.

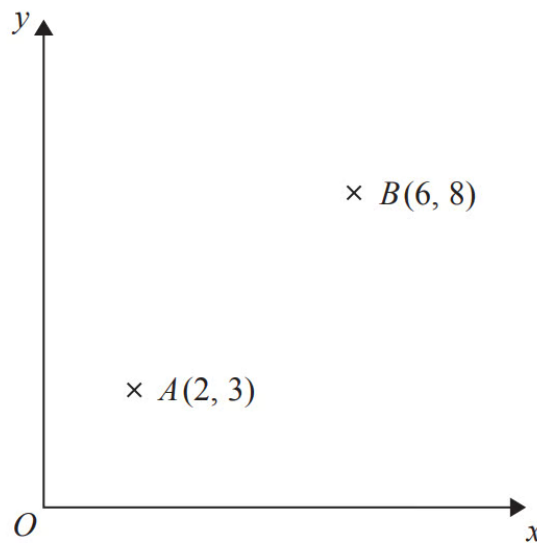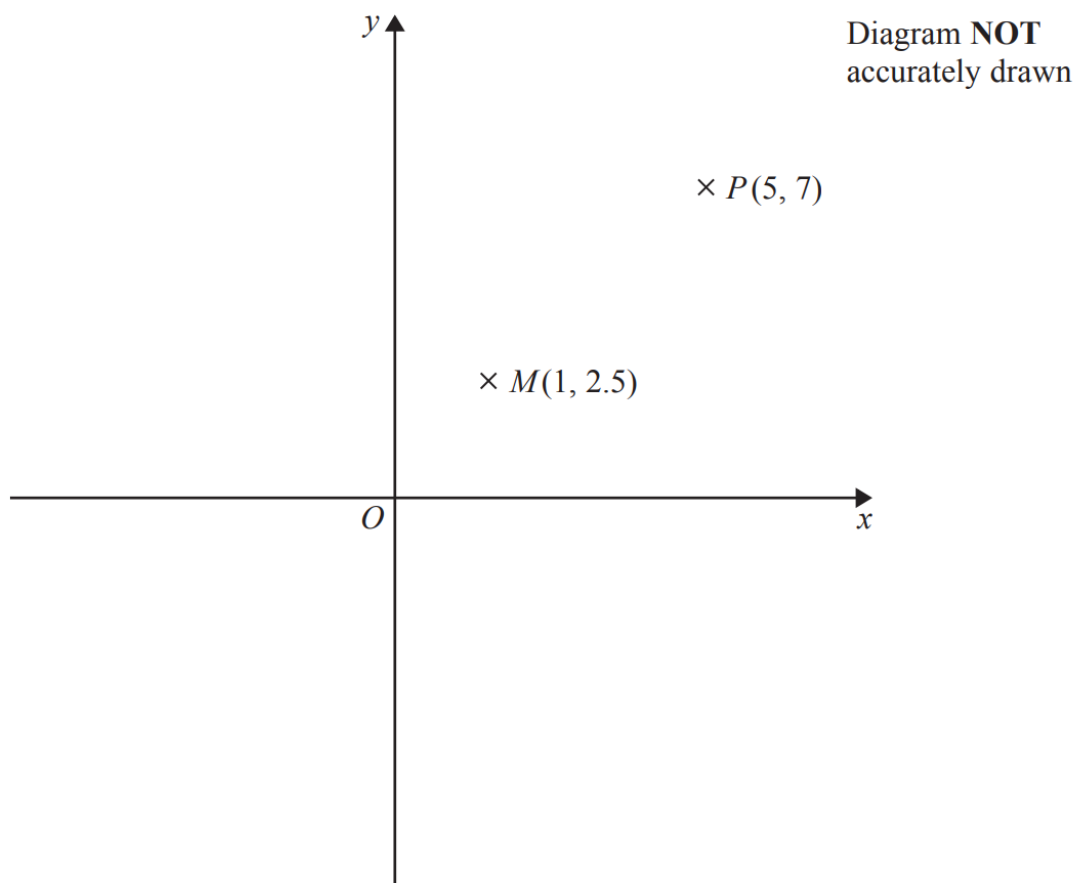Diagram **NOT**
accurately drawn

[2 marks]

Question 4

P is the point (−4, 4)
Q is the point (1, −5)

(b) Find the gradient of PQ.

[2 marks]

Question 5

Point P has coordinates (5, 7).
Point M has coordinates (1, 2.5).

Point M is the midpoint of the line PQ.

Find the coordinates of point Q.

(.................... , ...)

[2 marks]
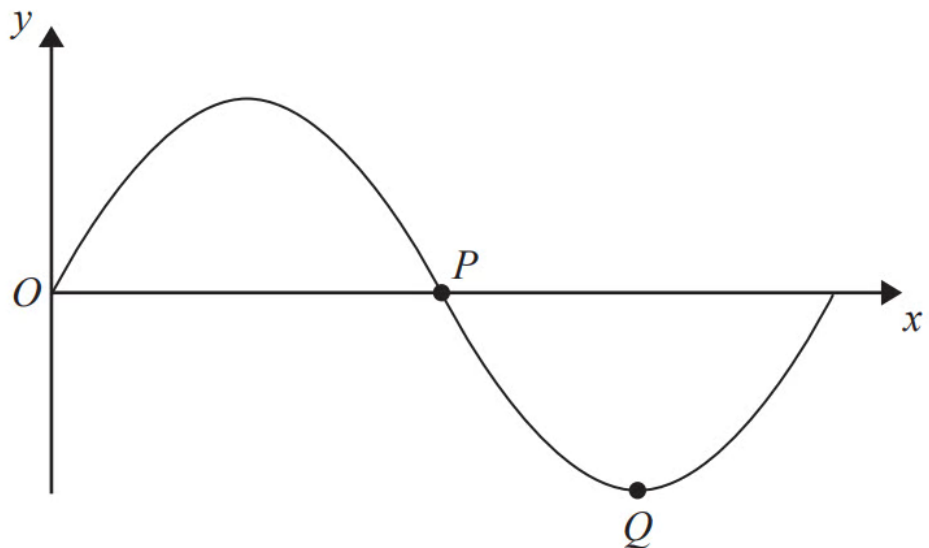
Question 6

(b) Write down the coordinates of the point Q.

[1 mark]

Question 7

The diagram shows part of a sketch of the curve $y = \sin x°$.

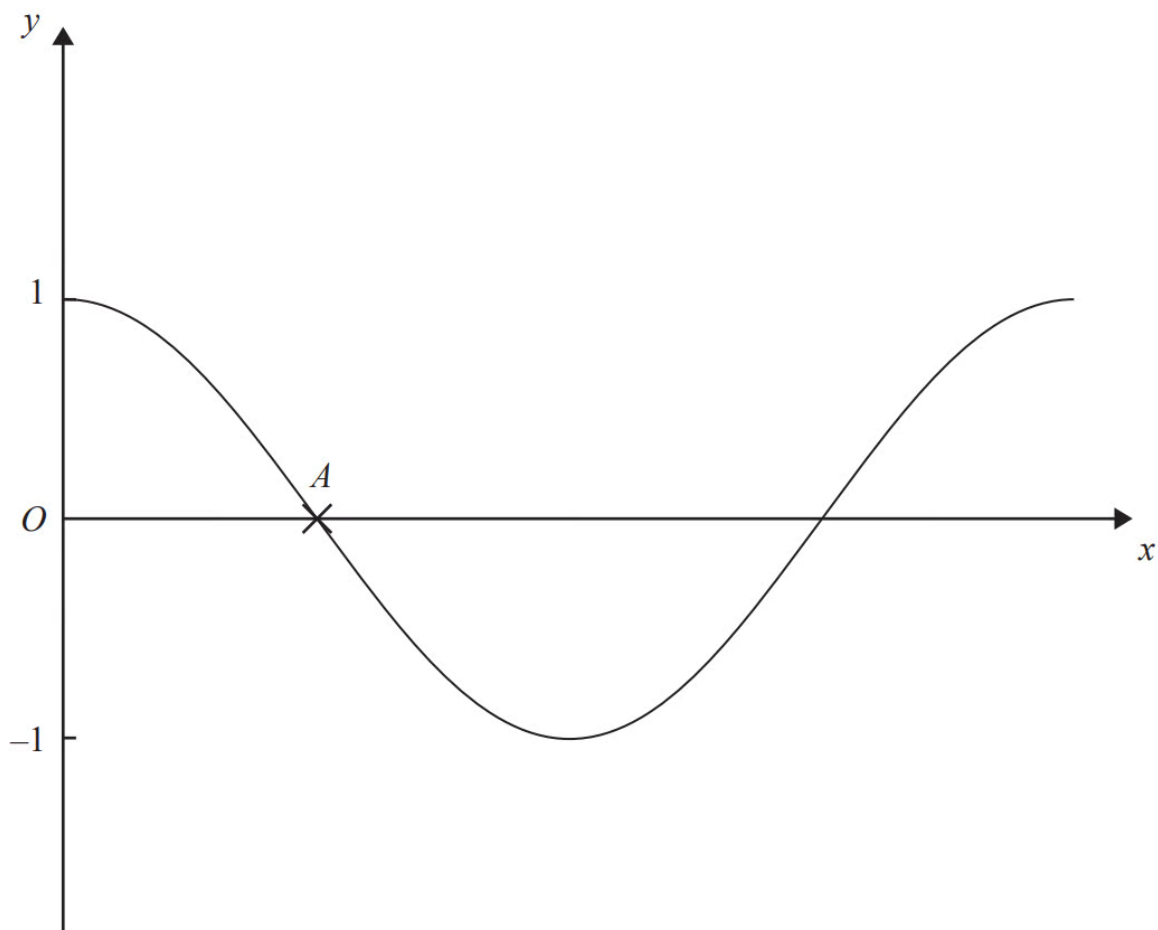(a) Write down the coordinates of the point P.

[1 mark]

Question 8

(b) On the same diagram, draw a sketch of the graph of $y = -\cos x$.

[1 mark]

Question 9
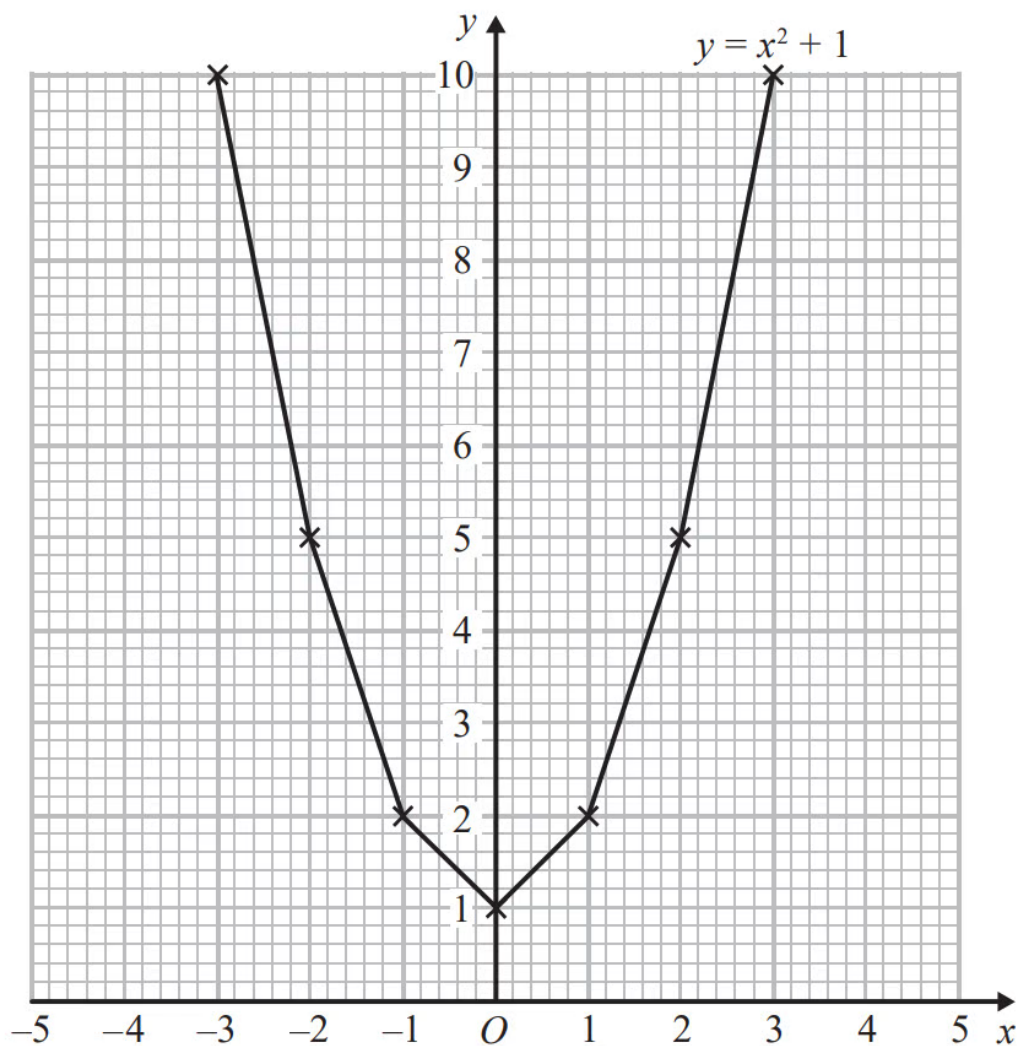
The diagram shows a sketch of the graph of $y = \cos x$.

(a) Write down the coordinates of the point A.

[1 mark]

Question 10

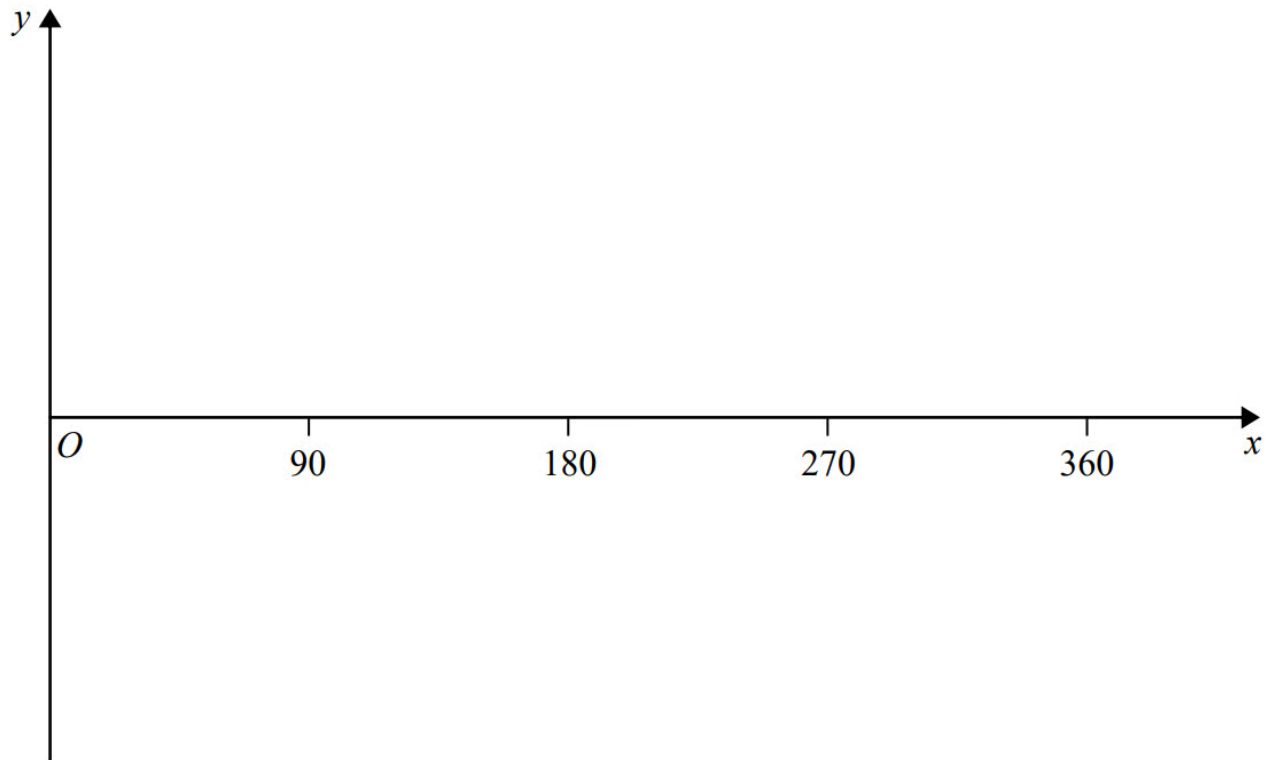Brogan needs to draw the graph of $y = x^2 + 1$

Here is her graph.

Write down one thing that is wrong with Brogan's graph.

[1 mark]

Question 11

Sketch the graph of $y = \cos x°$ for $0 \leqslant x \leqslant 360$

[2 marks]

Question 12

(a) Complete the table of values for $y = \dfrac{6}{x}$

x	0.5	1	2	3	4	5	6
y		6	3		1.5		1

[2 marks]

Question 13

(c) Use your graph to find estimates of the solutions to the equation $x^2 - x - 6 = -2$
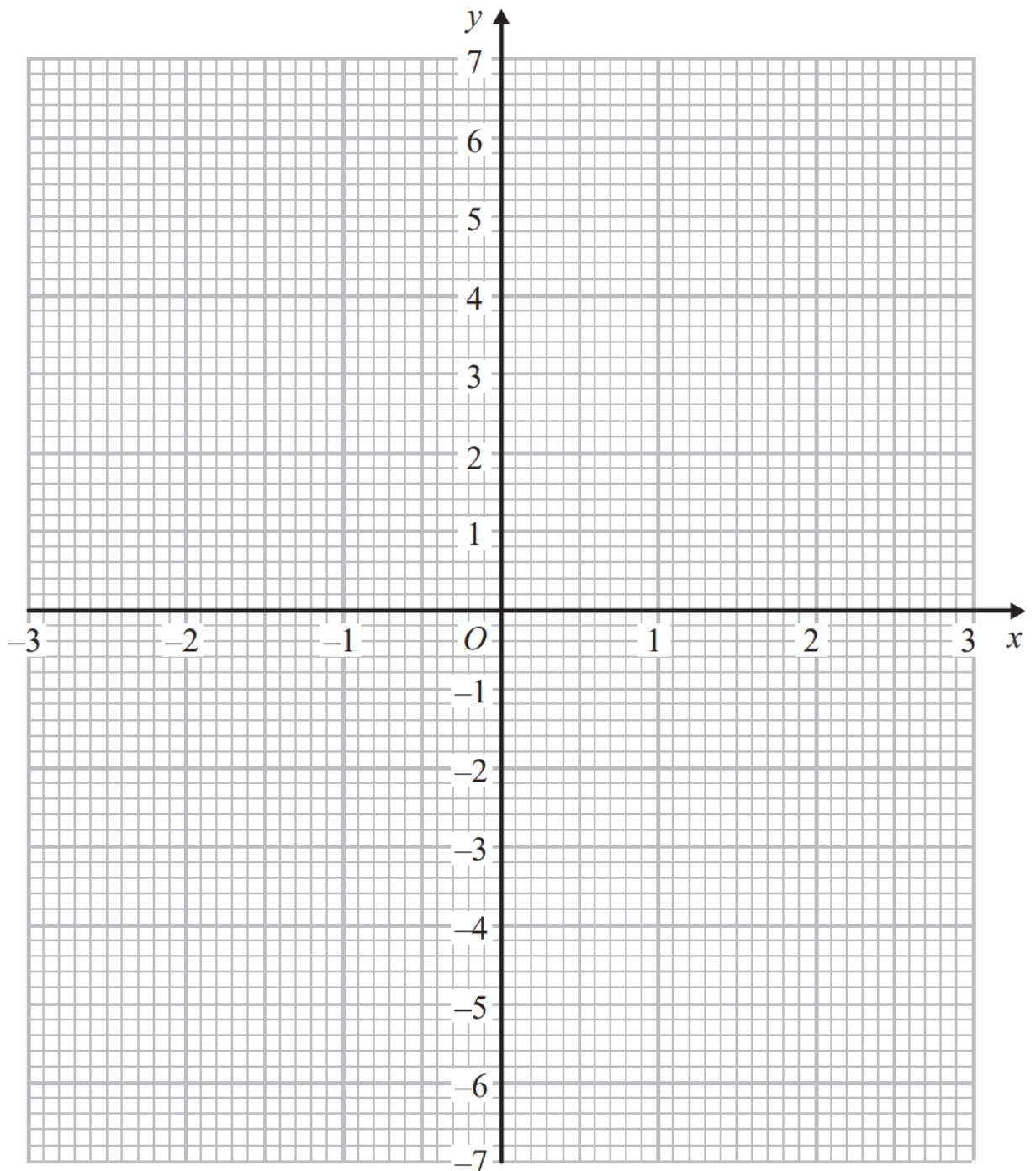
[2 marks]

Question 14

(a) Complete the table of values for $y = x^2 - x - 6$

x	−3	−2	−1	0	1	2	3
y	6			− 6			

[2 marks]

Question 15

(b) On the grid, draw the graph of $y = x^2 - x - 6$ for values of x from -3 to 3

[2 marks]