Name	Class

MATHS TEACHER HUB

www.MathsTeacherHub.com

Coordinates

(9 – 1) Topic booklet

Foundation

These questions have been collated from previous years GCSE Mathematics papers.

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.	Total Marks

Instructions

•Use **black** ink or ball-point pen.
•**Fill in the boxes** at the top of this page with your name, centre number and candidate number.
•Answer **all** questions.
•Answer the questions in the spaces provided
– *there may be more space than you need*.
•Diagrams are NOT accurately drawn, unless otherwise indicated.
•You must **show all your working out.**
•If the question is a **1F** question you are not allowed to use a calculator.
•If the question is a **2F** or a **3F** question, you may use a calculator to help you answer.

Information

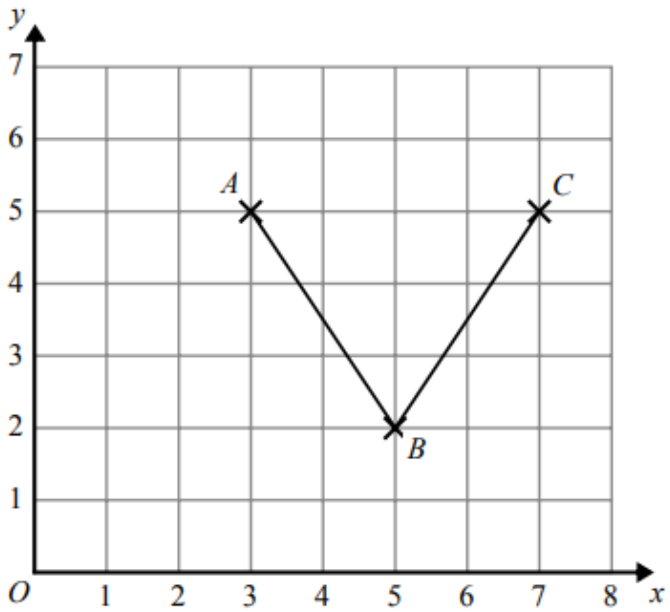
•The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question*.

Advice

•Read each question carefully before you start to answer it.
•Keep an eye on the time.
•Try to answer every question.
•Check your answers if you have time at the end.

Answer ALL questions
Write your answers in the space provided.
You must write down all the stages in your working.

4 Here is a grid showing the points A, B and C.



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

.....

(1)

(b) On the grid, mark with a cross (×) the point (1, 2).
Label this point D.

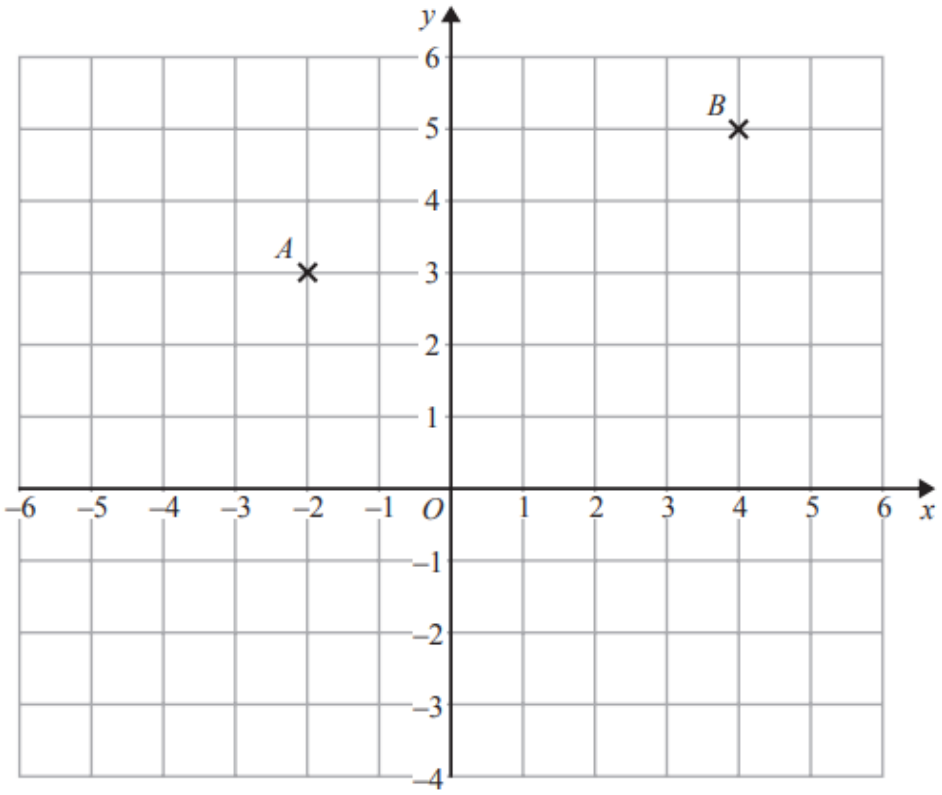
(1)

(c) On the grid, mark with a cross (×) a point E, so that the quadrilateral $ABCE$ is a kite.

(1)

Sample 1 – Paper 3F **(Total for Question 4 is 3 marks)**

5



(a) Write down the coordinates of point B.

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

(1)

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

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

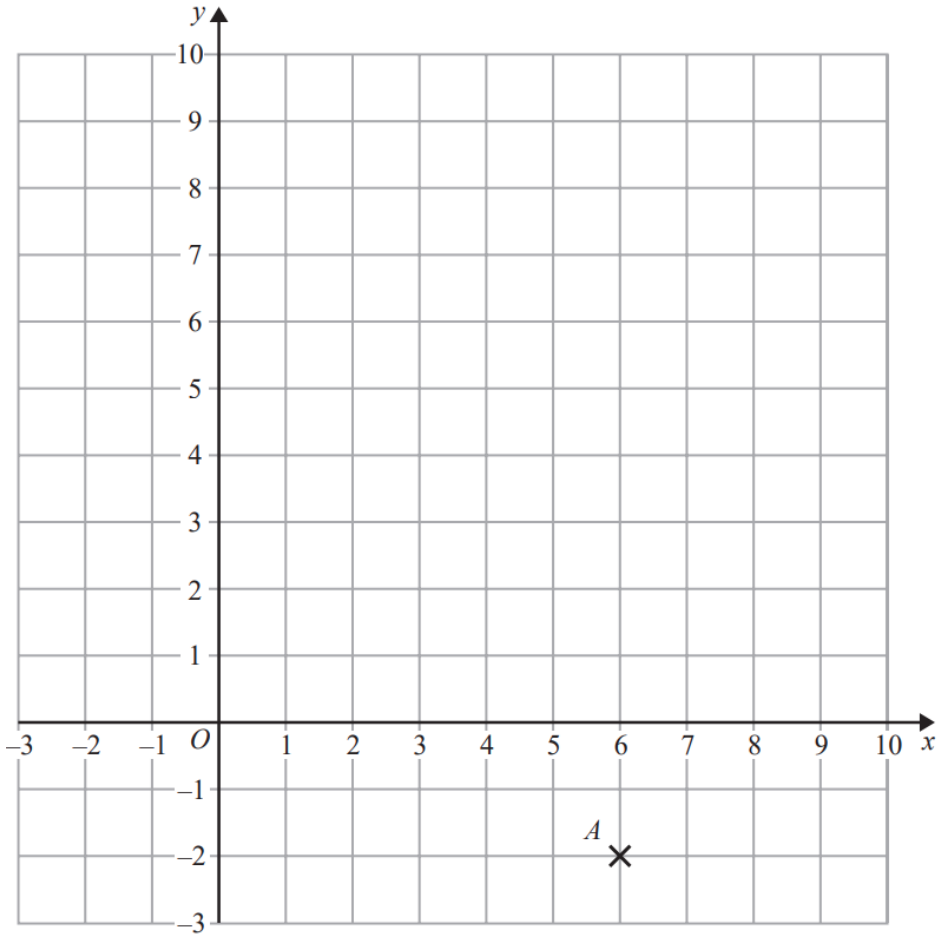
(1)

(c) On the grid, draw the line with equation $y = -3$

(1)

(Total for Question 5 is 3 marks)

7



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

(..... , ...)

(1)

(b) (i) Plot the point with coordinates (2, 9).
Label this point B.

(1)

(ii) Does point B lie on the straight line with equation $y = 4x + 1$?
You must show how you get your answer.

.....

.....

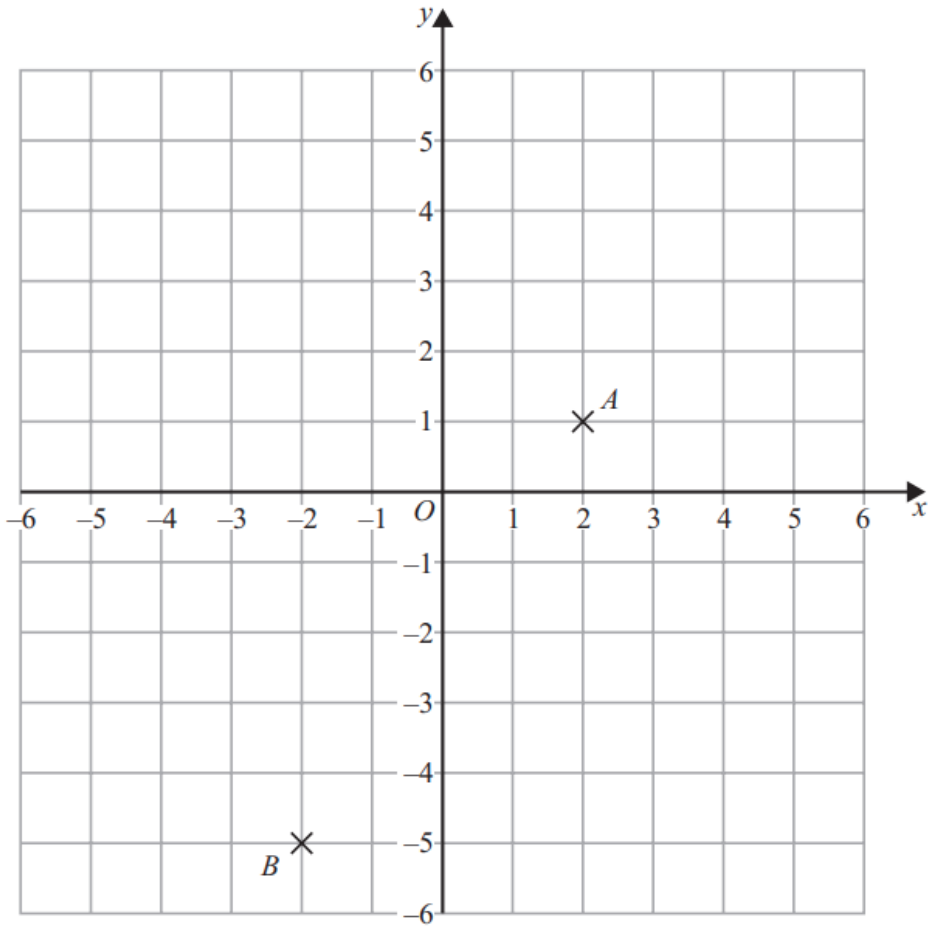
(1)

(c) On the grid, draw the line with equation $x = -2$

(1)

(Total for Question 7 is 4 marks)

8 The points A and B are shown on the grid.



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

(..... , ...)

(1)

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

(..... , ...)

(2)

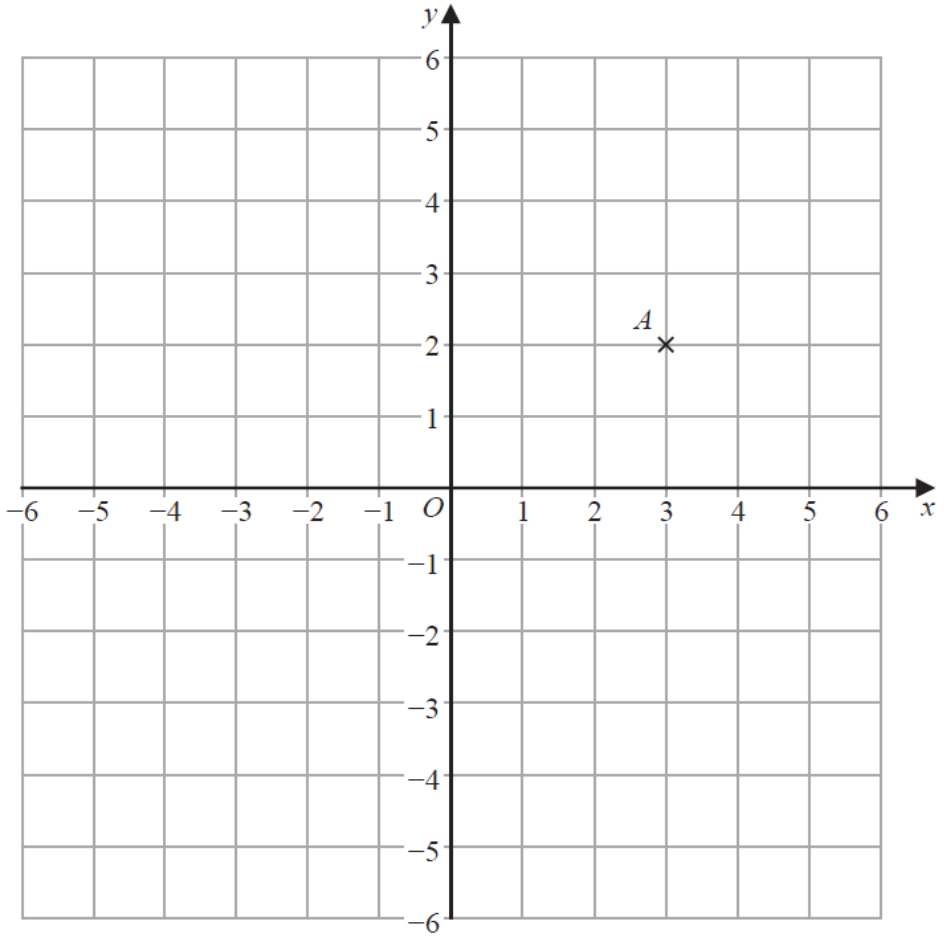
(c) On the grid, mark with a cross (×) the point with coordinates (–4, 2)
Label this point C.

(1)

May 2024 – Paper 2F

(Total for Question 8 is 4 marks)

8 Here is a centimetre grid.



(a) Write down the coordinates of point A.

(..... , ...)

(1)

(b) On the grid, mark with a cross (×) the point with coordinates (−4, 3)
Label this point B.

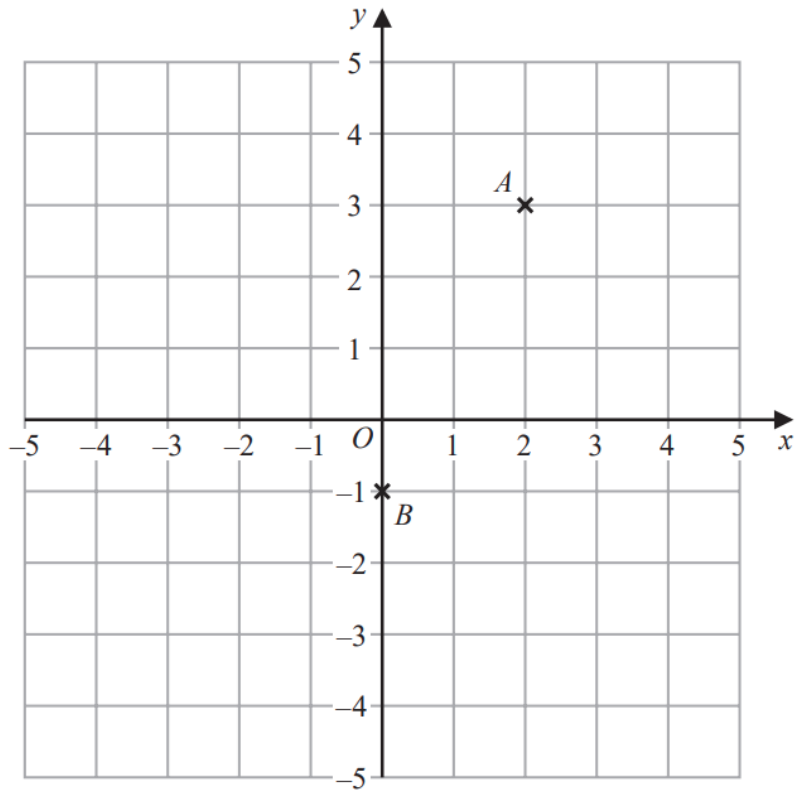
(1)

(c) On the grid, draw the circle with
centre (1, −1)
and radius 4 cm.

(2)

(Total for Question 8 is 4 marks)

8



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

(..... , ...)

(1)

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

(..... , ...)

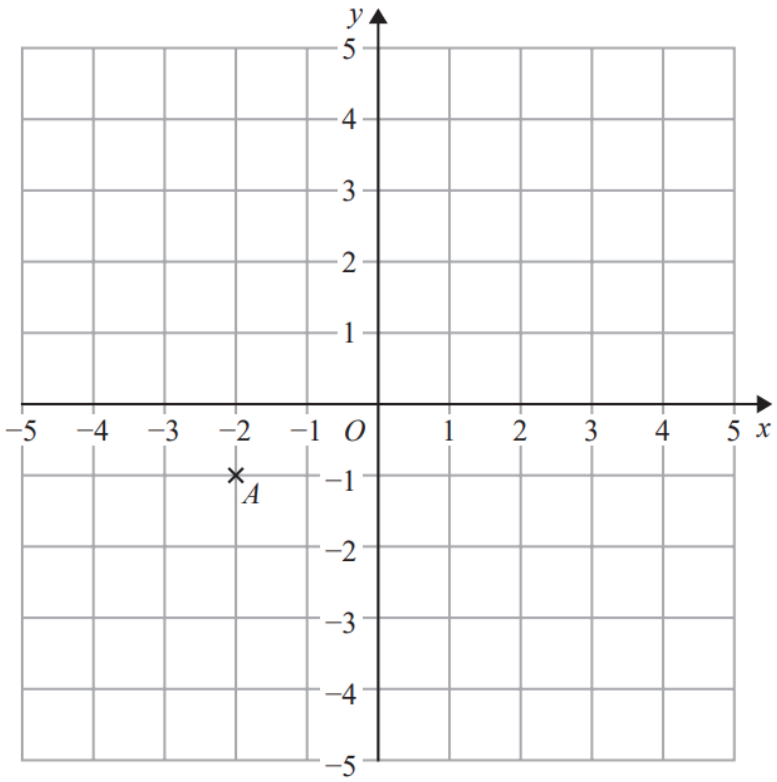
(1)

(c) On the grid, mark with a cross (×) the point (–2, 1)
Label this point C.

(1)

May 2020 – Paper 1F **(Total for Question 8 is 3 marks)**

8



(a) Write down the coordinates of point A.

(..... , ...)

(1)

(b) On the grid, mark with a cross (×) the point (2, 3)
Label this point B.

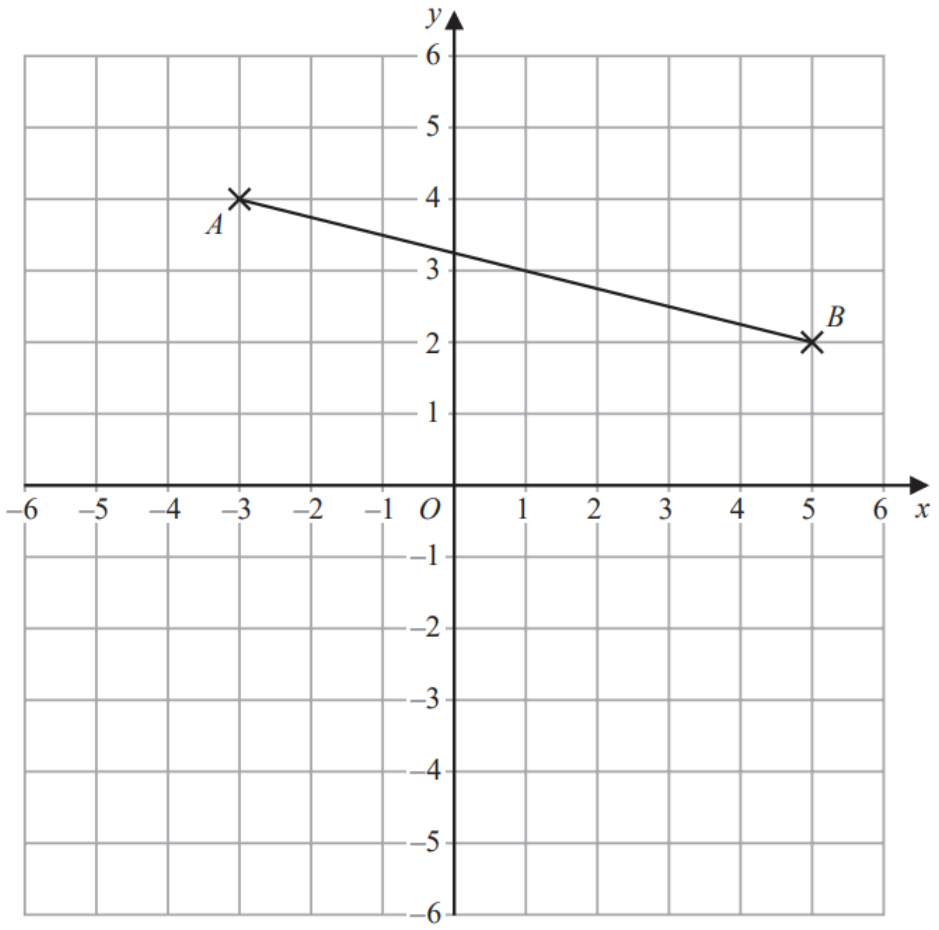
(1)

(c) On the grid, draw the line with equation $x = -4$

(1)

November 2018 – Paper 1F **(Total for Question 8 is 3 marks)**

9



(a) Write down the coordinates of point B.

(..... , ...)

(1)

(b) Plot the point with coordinates (4, –2)
Label this point C.

(1)

(c) Write down the coordinates of the midpoint of AB.

(..... , ...)

(1)

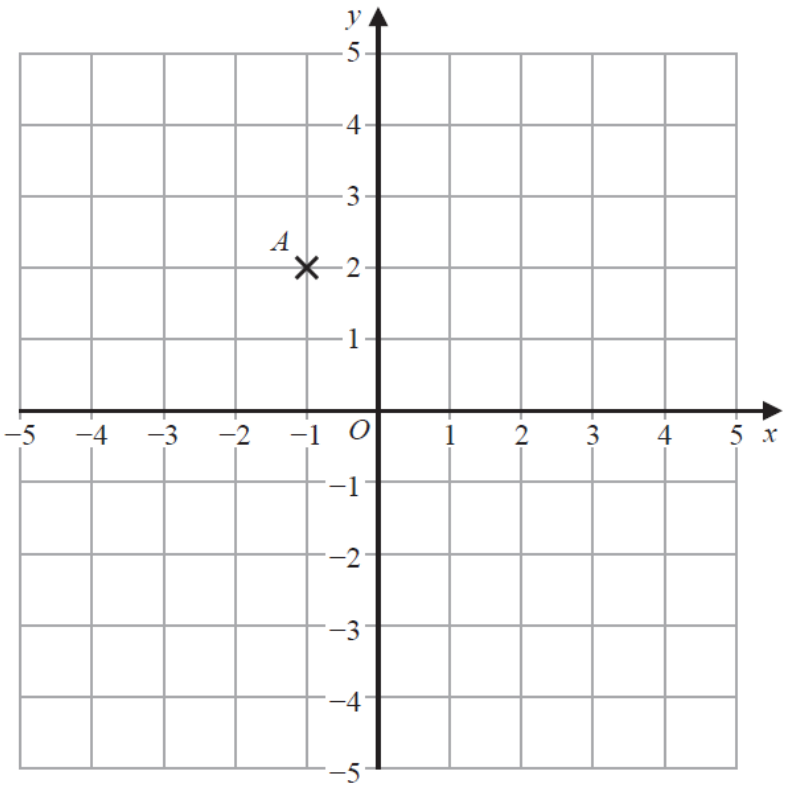
(d) Draw the line with equation $y = -4$

(1)

June 2023 – Paper 1F

(Total for Question 9 is 4 marks)

9



(a) Write down the coordinates of point A.

(..... , ...)

(1)

(b) On the grid, mark with a cross (×) the point (1, 4)
Label this point B.

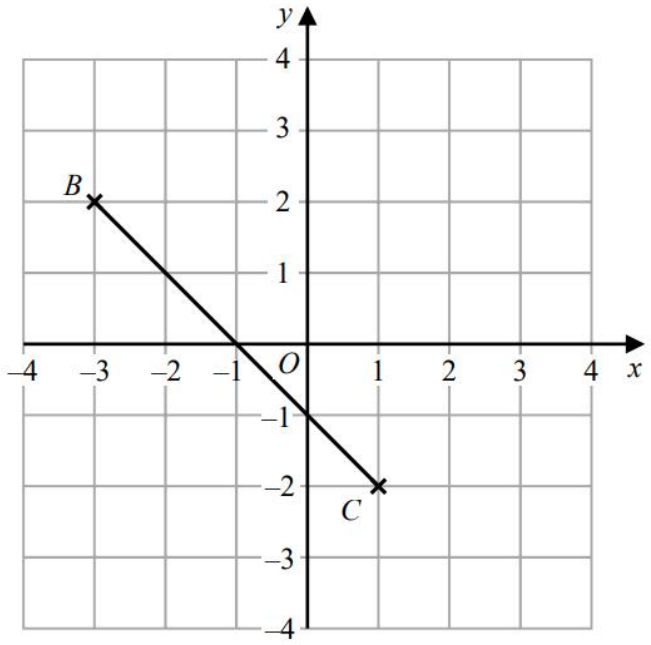
(1)

(c) On the grid, draw the line with equation $y = -3$

(1)

November 2022 – 3F **(Total for Question 9 is 3 marks)**

10



(a) Plot the point with coordinates (3, 2)
Label this point *A*.

(1)

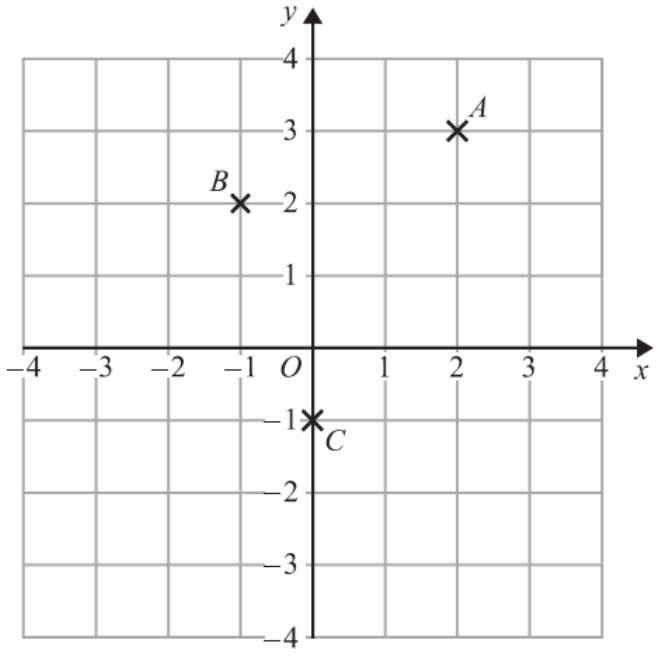
(b) Write down the coordinates of the midpoint of *BC*.

(..... , ...)

(1)

November 2019 – Paper 1F **(Total for Question 10 is 2 marks)**

14



(a) Write down the coordinates of point C.

(..... , ...)

(1)

$ABCD$ is a square.

(b) On the grid, mark with a cross (✕) the point D so that $ABCD$ is a square.

(1)

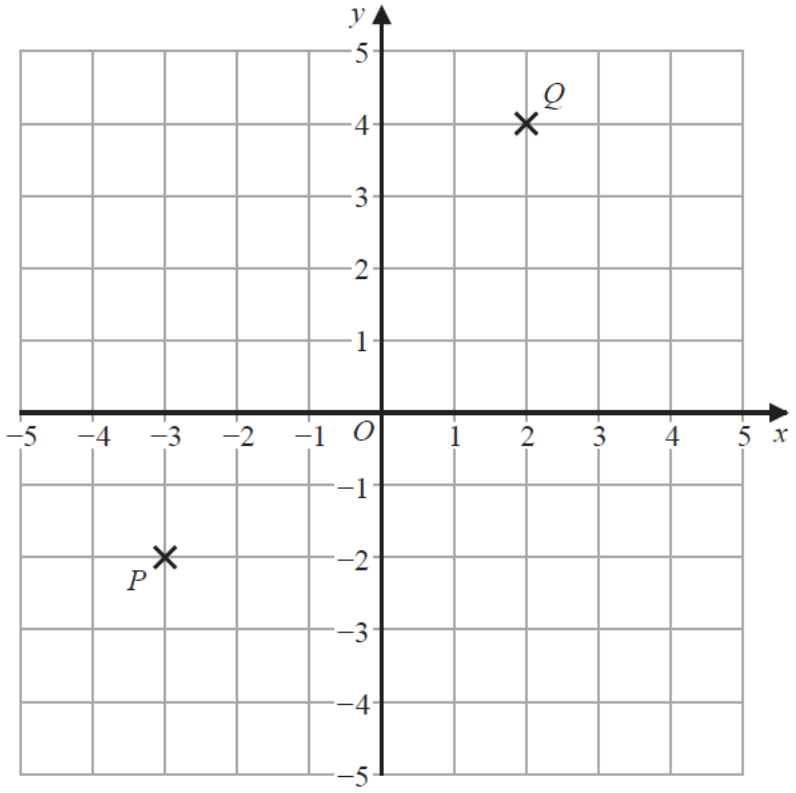
(c) Write down the coordinates of the midpoint of the line segment BC.

(..... , ...)

(1)

(Total for Question 14 is 3 marks)

15



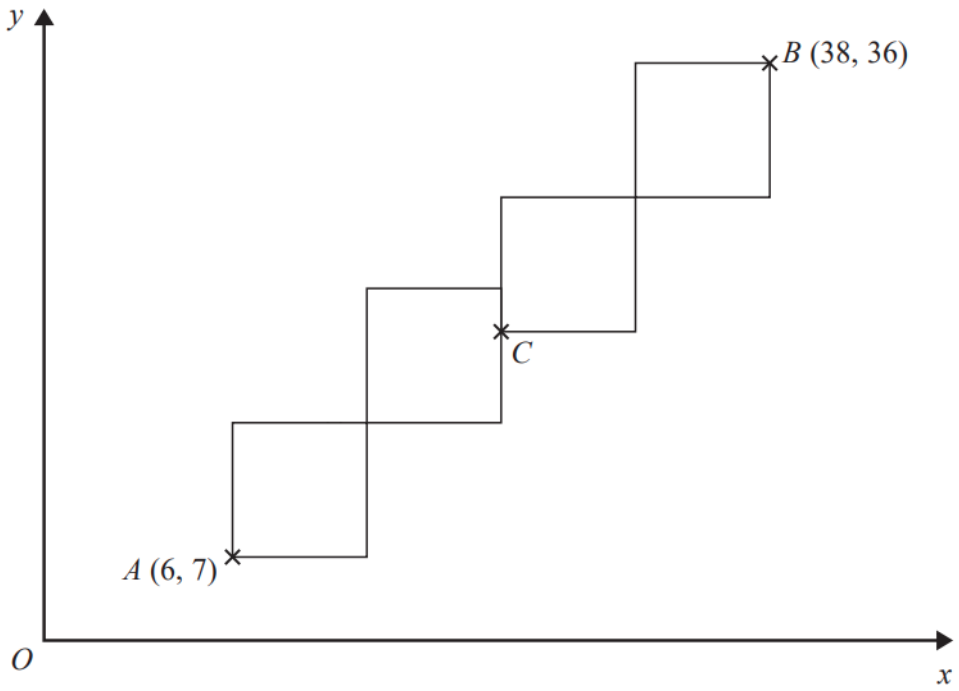
Find the coordinates of the midpoint of PQ.

(..... , ...)

November 2022 – 1F **(Total for Question 15 is 2 marks)**

24 A pattern is made from four identical squares.

The sides of the squares are parallel to the axes.



Point A has coordinates (6, 7)
Point B has coordinates (38, 36)
Point C is marked on the diagram.

Work out the coordinates of C.

(..... , ...)

(Total for Question 24 is 5 marks)