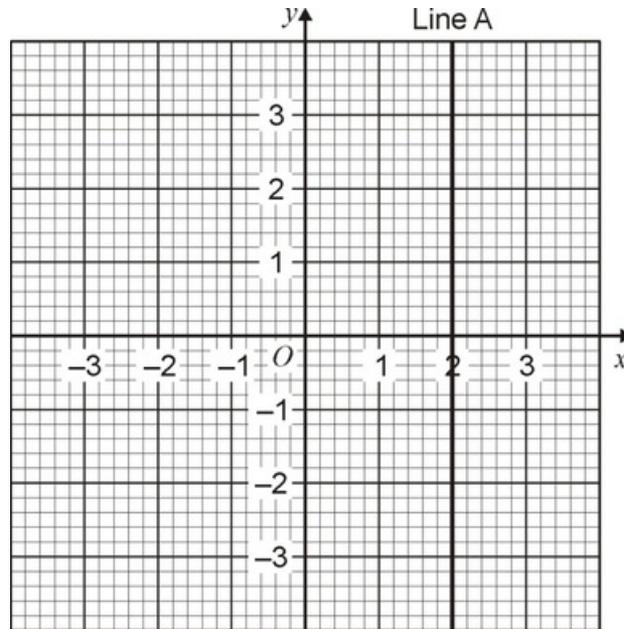


Q1.



(a) Circle the equation of line A.

$y = 2$

$x = 2$

$x + y = 2$

$y = x + 2$

(1)

(b) On the grid draw the line $y = x$

(1)

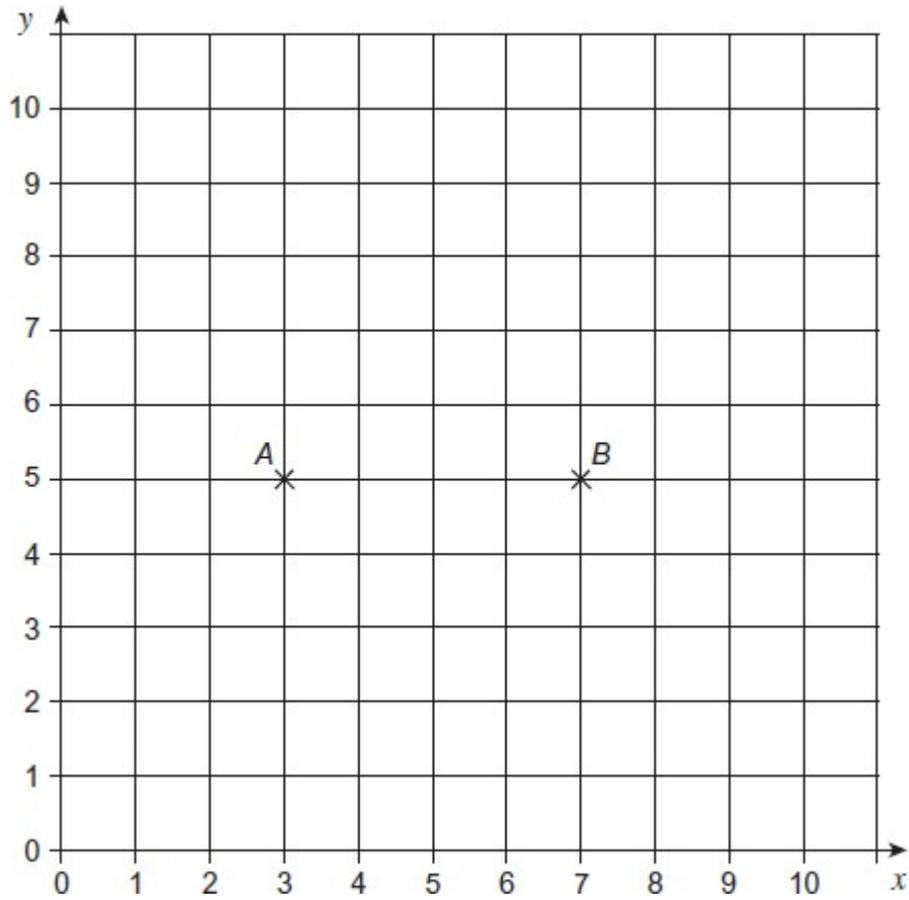
(c) Write down the coordinates of the point where the line $y = x$ crosses line

Answer (..... ,)

(1)

(Total 3 marks)

Q2. Points A and B are shown on the centimetre grid.



(a) Draw a rectangle $ABCD$ on the grid with area 12 cm^2 .

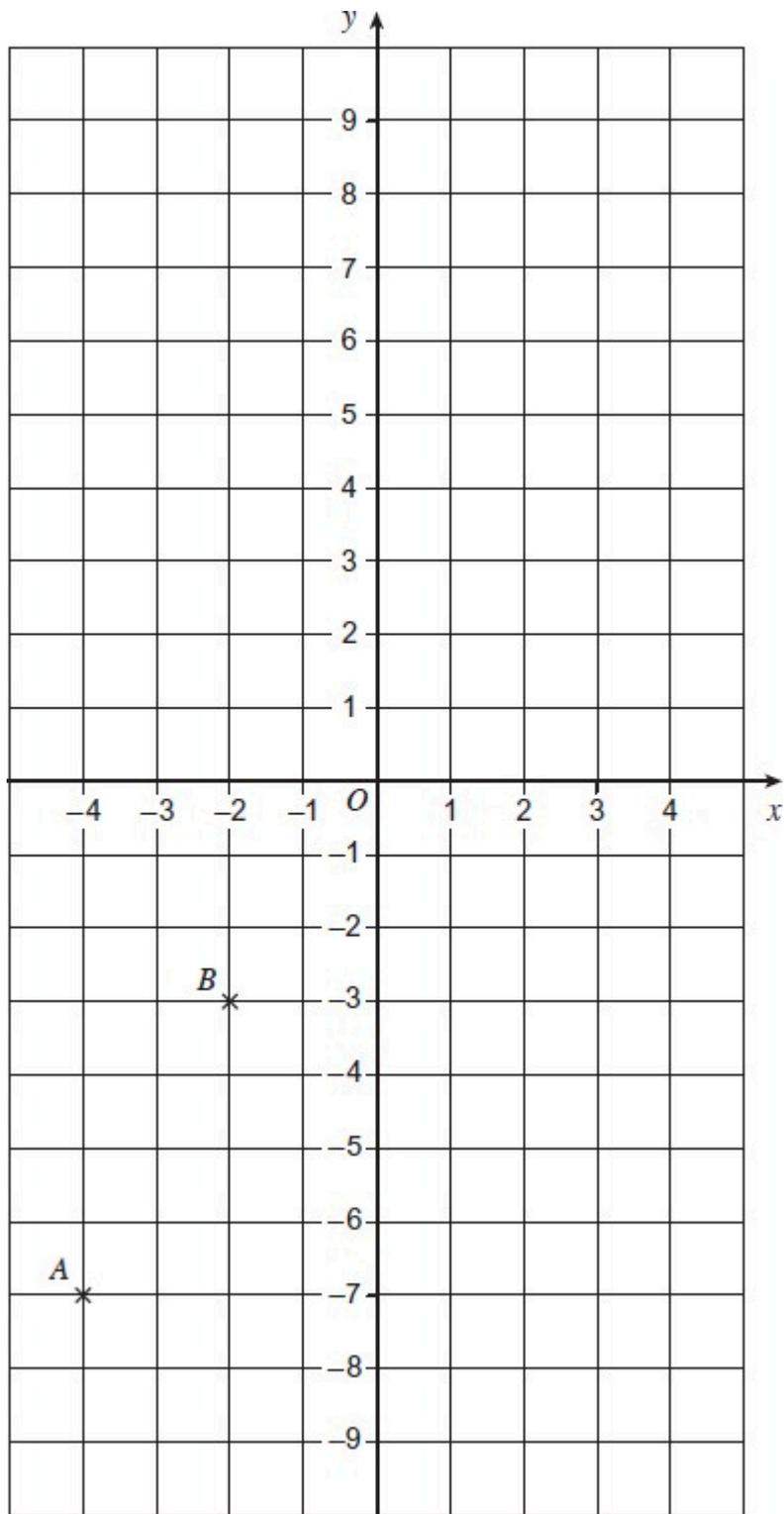
(2)

(b) Write down the coordinates of point C and point D .

Answer C (..... ,) and D (..... ,)

(2)
(Total 4 marks)

Q3. Points A $(-4, -7)$ and B $(-2, -3)$ are plotted.
 A and B lie on the line $y = 2x + 1$



Write down the coordinates of two other points on the line $y = 2x + 1$

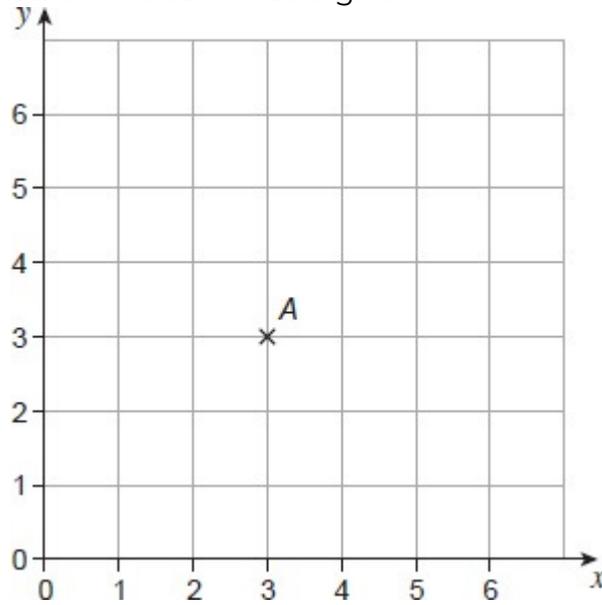
Answer (..... ,)

(..... ,)

(Total 2 marks)

Q4.

Point A (3, 3) is plotted on the centimetre grid.



(a) Plot B at (5, 1).

(1)

(b) C and D are each

2 cm from A
and
2 cm from B .

Plot C and D on the grid.

(2)

(c) Join C and D with a straight line.

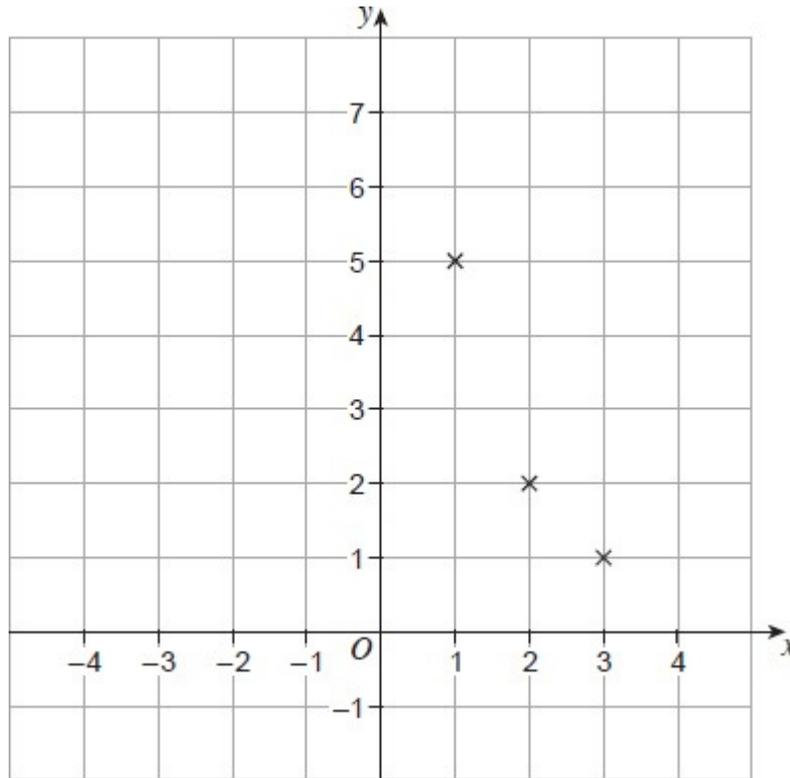
Write down the coordinates of the midpoint of the line.

Answer (..... ,)

(1)

(Total 4 marks)

Q5.



(a) Three points are shown on the grid.

Circle the point which does not lie on the line $2x + y = 7$

(1)

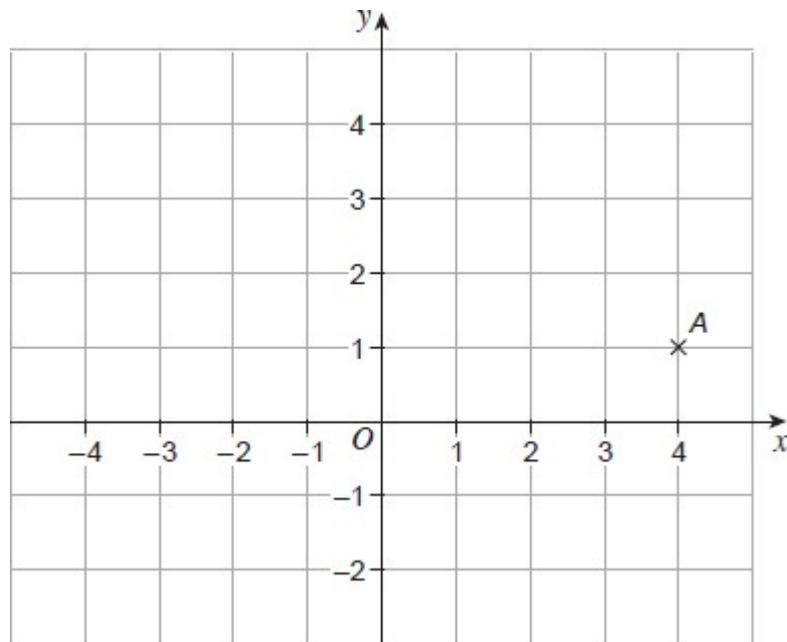
(b) Work out the coordinates of the point where the line $2x + y = 7$ crosses the x-axis.

Answer (..... ,)

(2)
(Total 3 marks)

Q6.

Point A is marked on the grid.



(a) What are the coordinates of A?

Answer (..... ,)

(1)

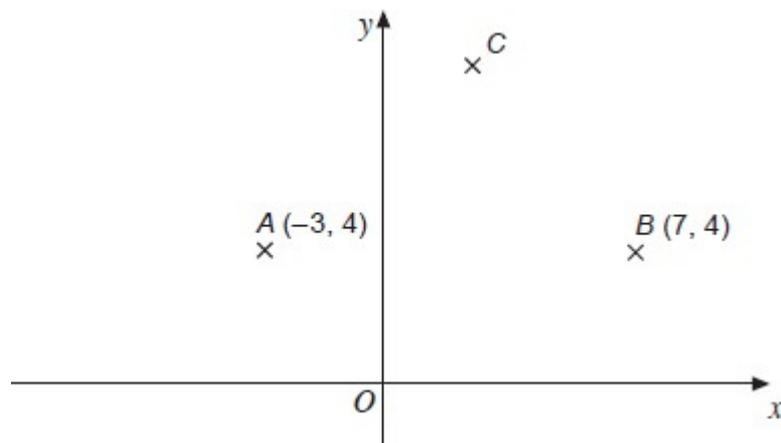
(b) Plot and label the point B (-2, 4).

(1)
(Total 2 marks)

Q7.

Points A, B and C are plotted.

Not drawn accurately



They form an **isosceles** triangle such that $AC = BC$. A is $(-3, 4)$ and B is $(7, 4)$. The area of triangle ABC is 20 square units.

Work out the coordinates of C .

You **must** show your working, some of which may be on the diagram.

.....

.....

.....

.....

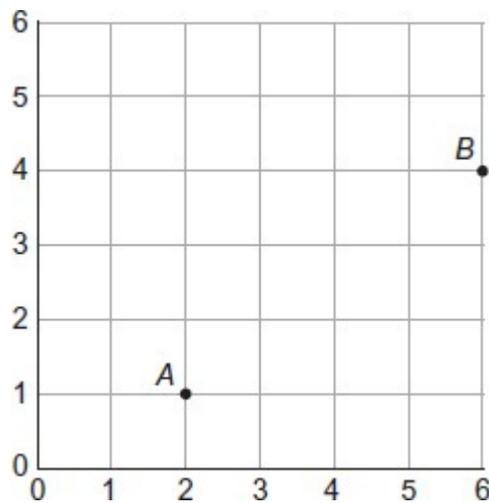
Answer (..... ,)

(Total 4 marks)

Q8.

Here is a scale diagram of a village.
The grid lines are the roads in the village.

Scale 1 centimetre represents 100 metres



(a) Alan's house, A , has coordinates $(2, 1)$.

Write down the coordinates of Ben's house, B .

Answer (..... ,)

(1)

(b) Alan walks along the roads from A to B .

Work out the **shortest** possible distance that he can walk.

.....

Answer metres

(2)

(c) Colin's house, C , is in the village.

The shortest distance along the roads from C to A is 600 metres.

The shortest distance along the roads from C to B is 500 metres.

Work out the coordinates of C .

Answer (..... ,)

(2)

(Total 5 marks)

Q9. A is the point $(2, 9)$

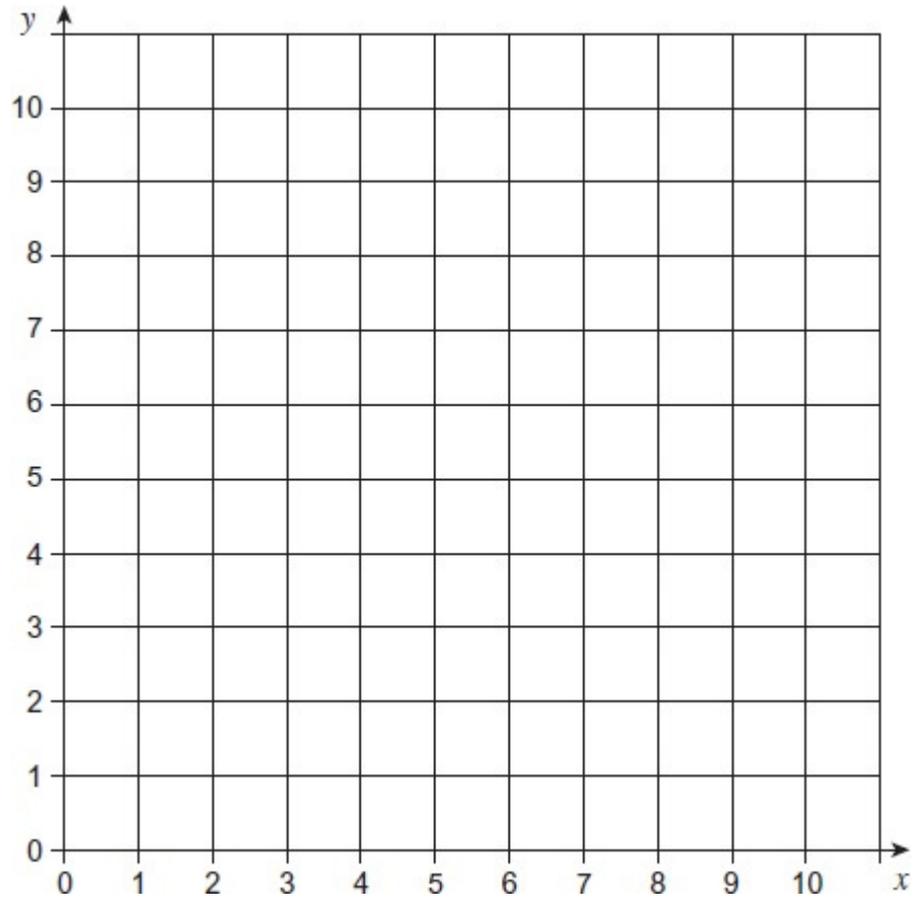
B is the point $(6, 5)$

ABC is a straight line.

$AB = BC$

Work out the coordinates of point C .

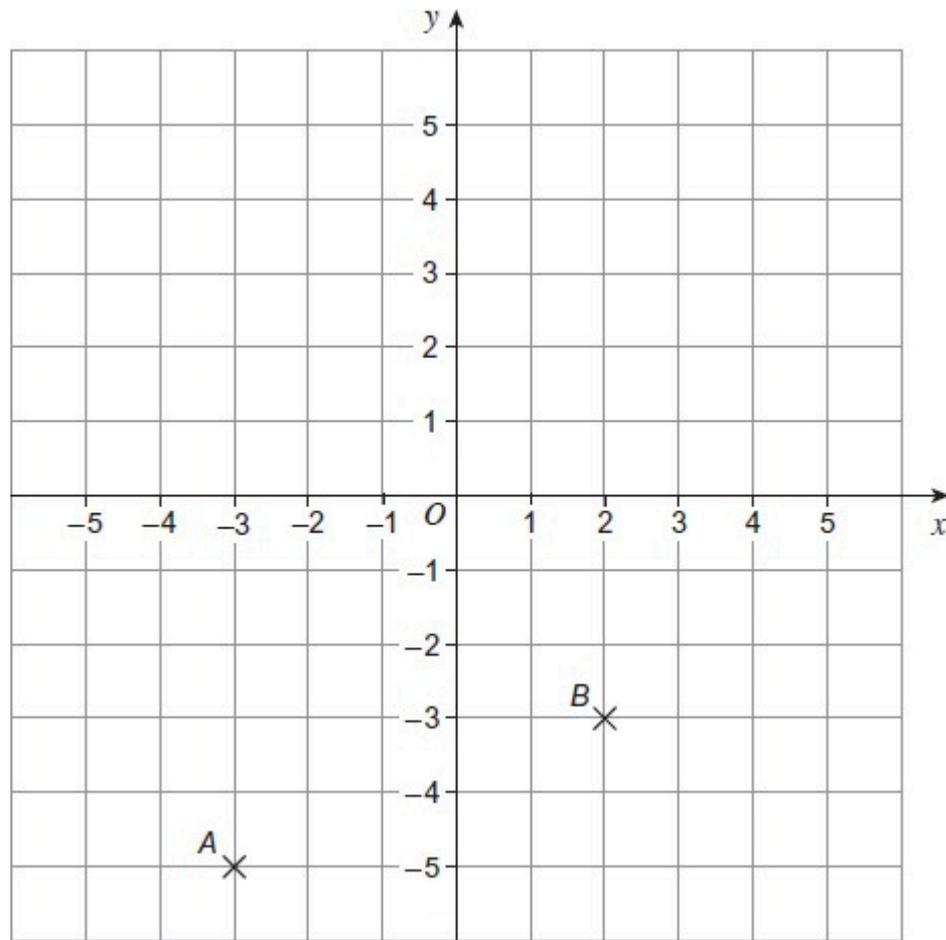
You may use the grid to help you.



Answer (..... ,)

(Total 2 marks)

Q10. Points *A* and *B* are shown on the grid.



(a) Write down the coordinates of A and B.

Answer A (..... ,)

B (..... ,)

(2)

(b) Plot point C on the grid so that

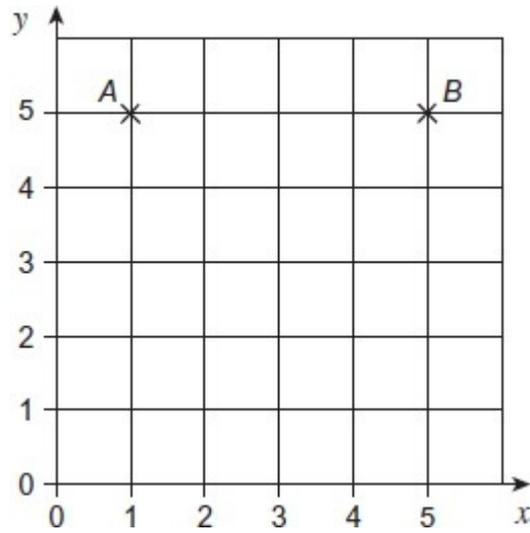
the x-coordinate of C is less than the x-coordinate of A

and the y-coordinate of C is positive and even.

(2)

(Total 4 marks)

Q11. Points A and B are shown on the centimetre grid.



- (a) Write down the coordinates of the midpoint of AB .

Answer (..... ,)

(1)

- (b) Point C is plotted so that

its y -coordinate is 3

and

ABC is a right-angled triangle.

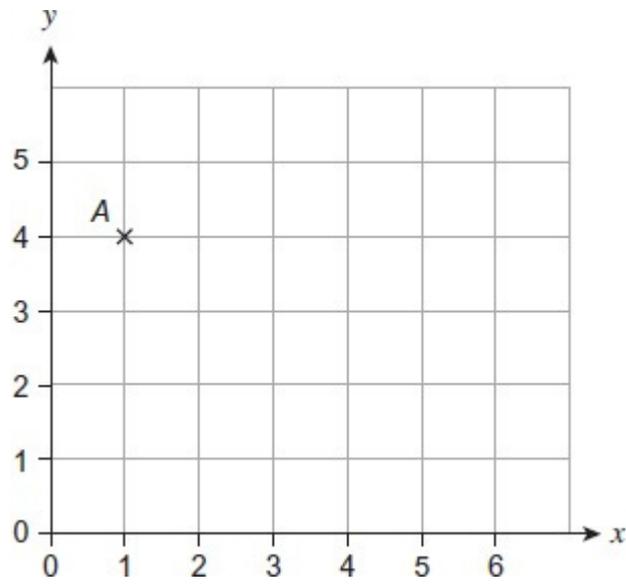
Write down the coordinates of **three** possible points for C .

Answer (..... , 3), (..... , 3) and (..... , 3)

(3)

(Total 4 marks)

Q12.



(a) Write down the coordinates of A.

Answer (..... ,)

(1)

(b) M is the midpoint of the line AB .

M is the point $(3, 4)$.

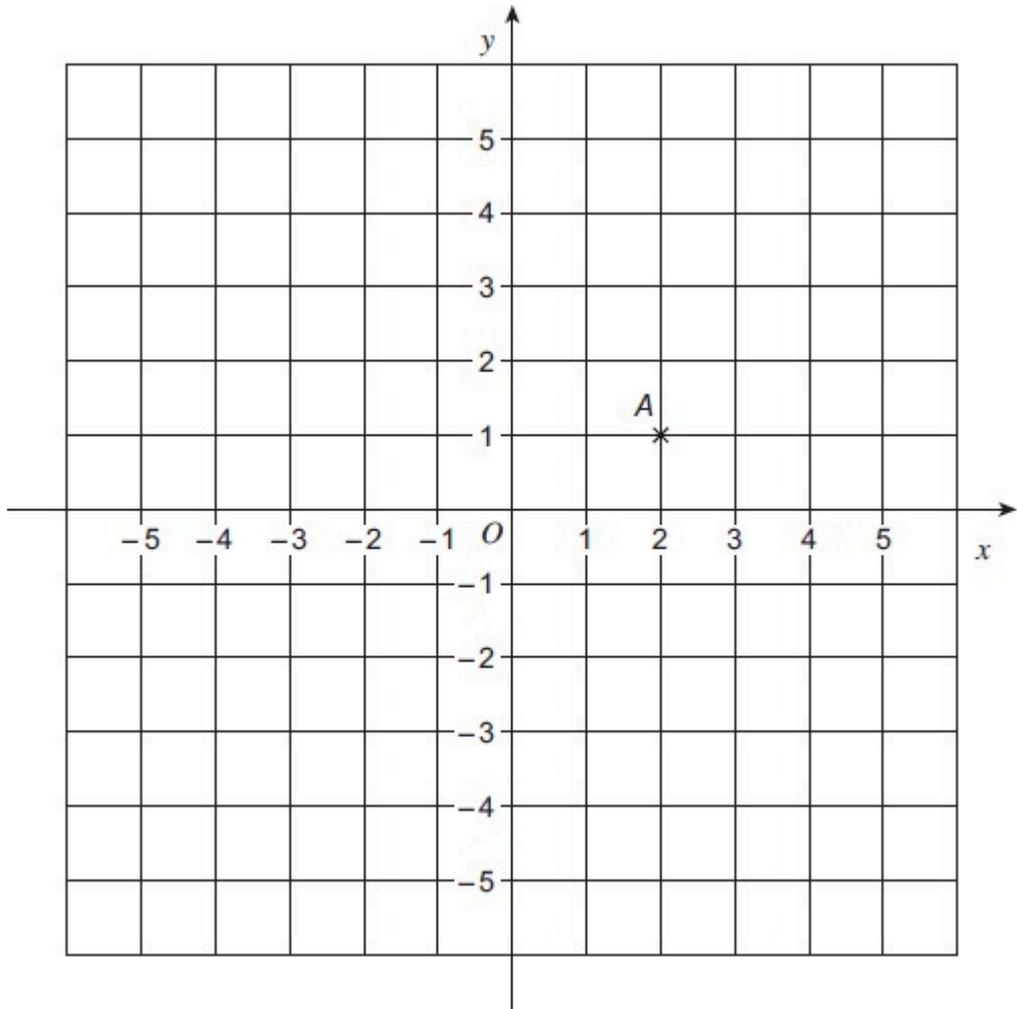
Plot the point B .

(2)

(Total 3 marks)

Q13.

Point A is shown on the centimetre grid.



(a) Write down the coordinates of A.

Answer (..... ,)

(1)

(b) Plot B (-4,1) on the grid.

(1)

(c) ABC is a right-angled triangle.
It has an area of 12 cm².

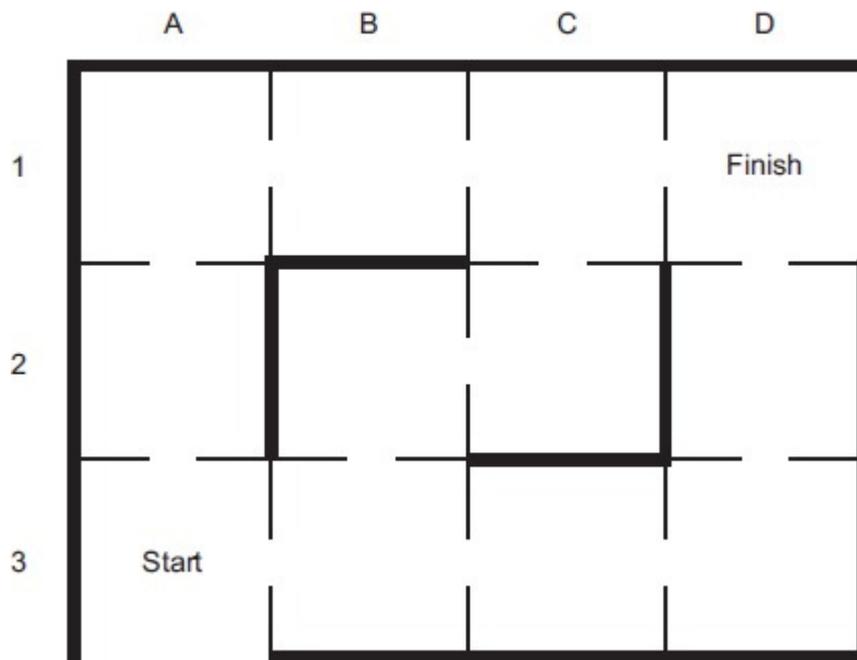
Mark a possible point C on the grid.

(2)
(Total 4 marks)

Q14.

(a) A maze has 12 rooms.

Walls without doors are shown as **thick black lines**.
Other walls have doors which are shown as gaps.



One path from Start to Finish is $A3 \rightarrow B3 \rightarrow C3 \rightarrow D3 \rightarrow D2 \rightarrow D1$

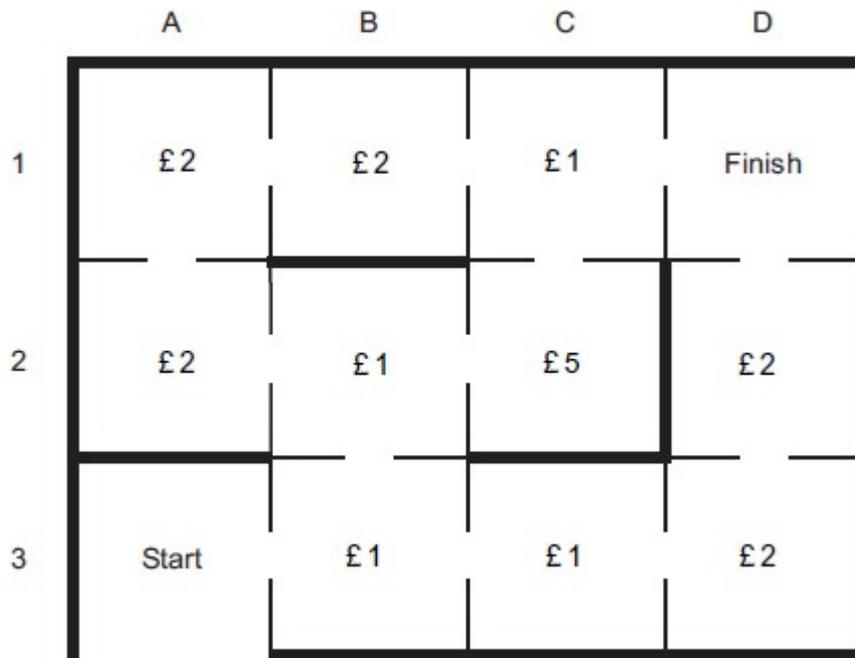
Complete these two paths through the maze.

First path $A3 \rightarrow B3 \rightarrow B2 \rightarrow \dots$

Second path $A3 \rightarrow A2 \rightarrow A1 \rightarrow \dots$

(2)

(b) This maze has money in some of the rooms.



(i) How much is in room B3?

£

(1)

(ii) Which room has £5?

Answer

(1)

(iii) Money is collected as you go through the maze from Start to Finish. You can only go through a room **once**.

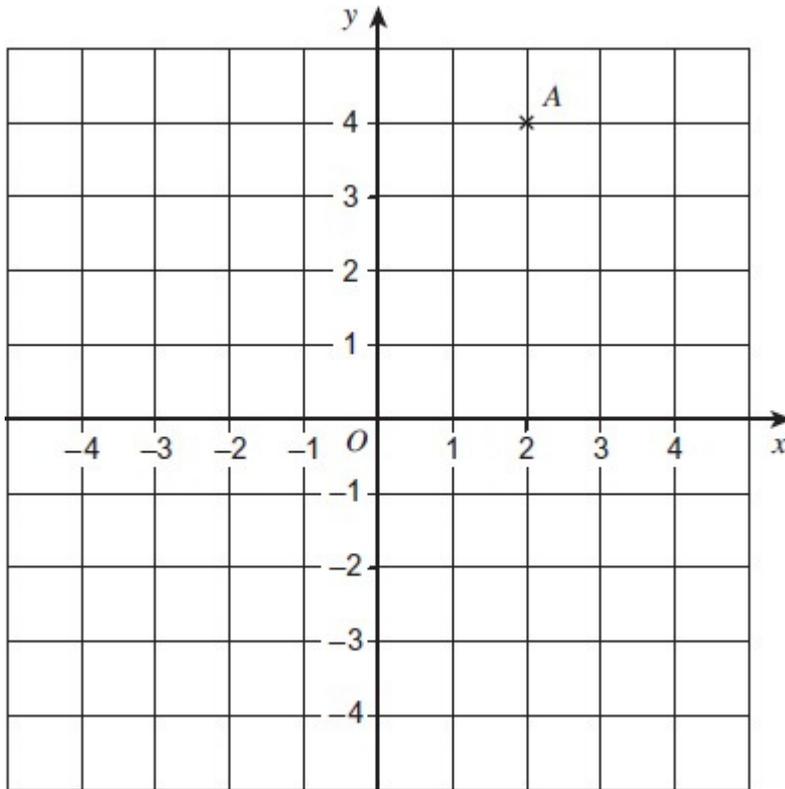
Complete the path that collects the most money.

A3 → B3 →

.....

(2)
 (Total 6 marks)

Q15.



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

Answer (..... ,)

(1)

(b) Plot the point $(-3, -1)$ on the grid.
Label it *B*.

(1)

(c) Point *C* has

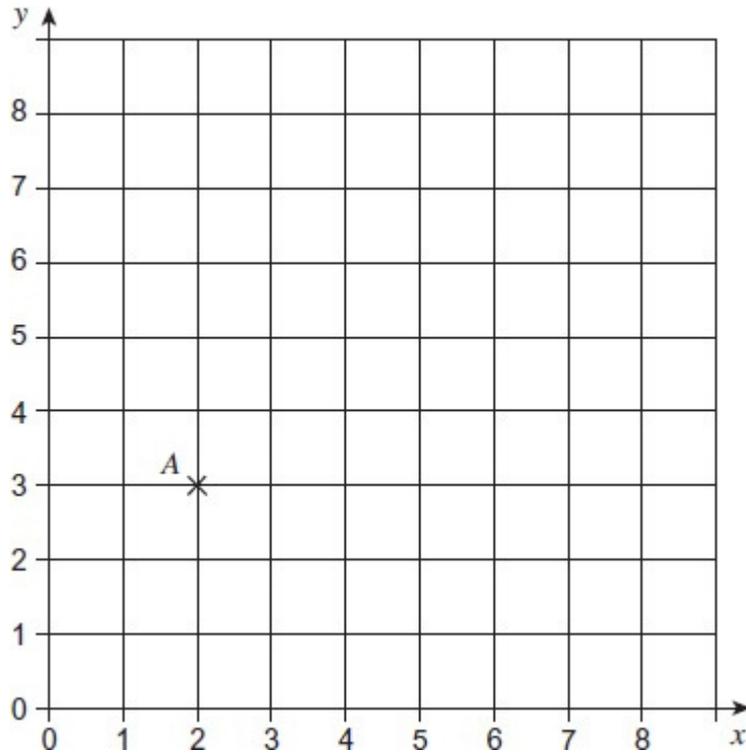
- the same *x*-coordinate as point *A*
- the same *y*-coordinate as point *B*.

Write down the coordinates of point *C*.

Answer (..... ,)

(1)
(Total 3 marks)

Q16.



(a) Write down the coordinates of A.

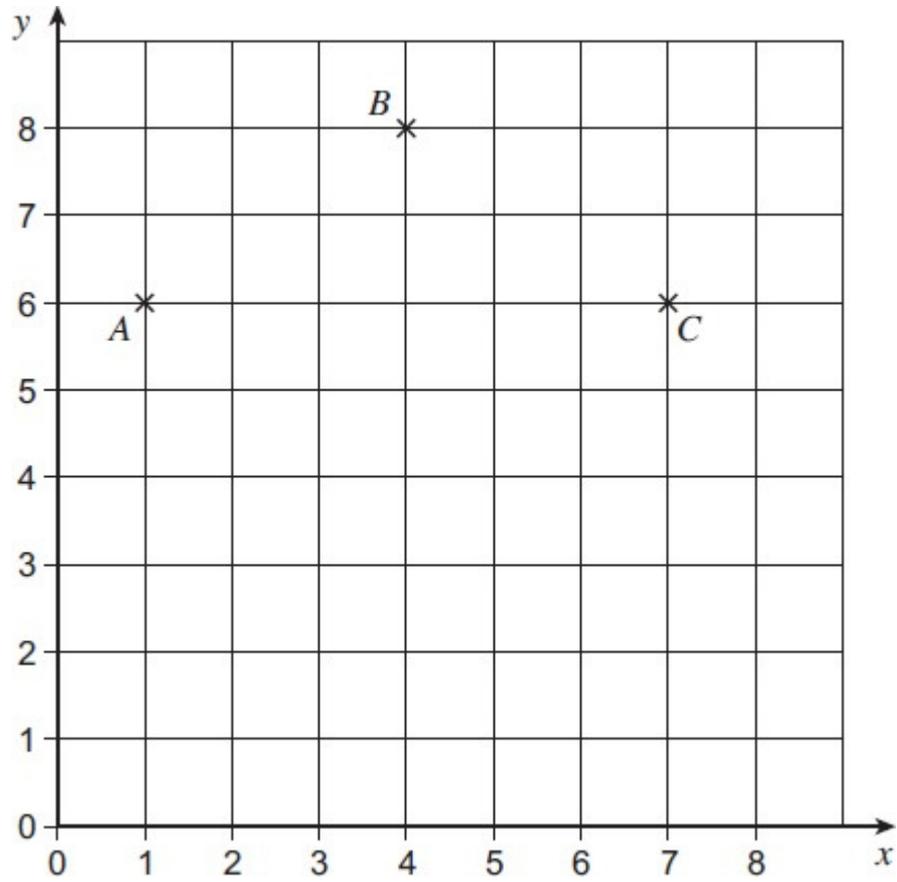
Answer (..... ,)

(1)

(b) Plot the point $B(8, 3)$ on the grid.

(1)
(Total 2 marks)

Q17. A , B and C are plotted on this centimetre grid.



(a) Write down the coordinates of A.

Answer(..... ,)

(1)

(b) Write down the coordinates of the midpoint of AC.

Answer(..... ,)

(1)

(c) Plot a point D on the grid so that ABCD is a kite.

(1)
(Total 3 marks)