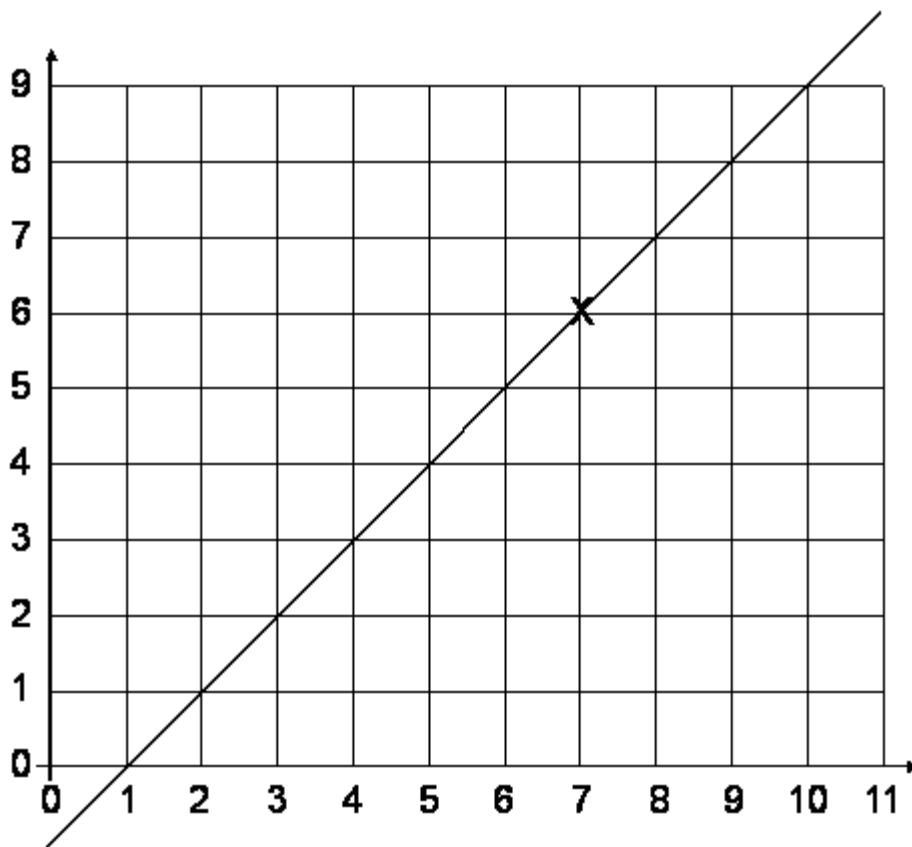


Name _____

Date _____

LO: to solve problems involving co-ordinates

Q1.



(7, 6) are coordinates of a point on the line.

(a) Tick (✓) which of these are coordinates of other points on the line.

(3,2)

(9,10)

(5,4)

(4,2)

(10,9)

(7,9)

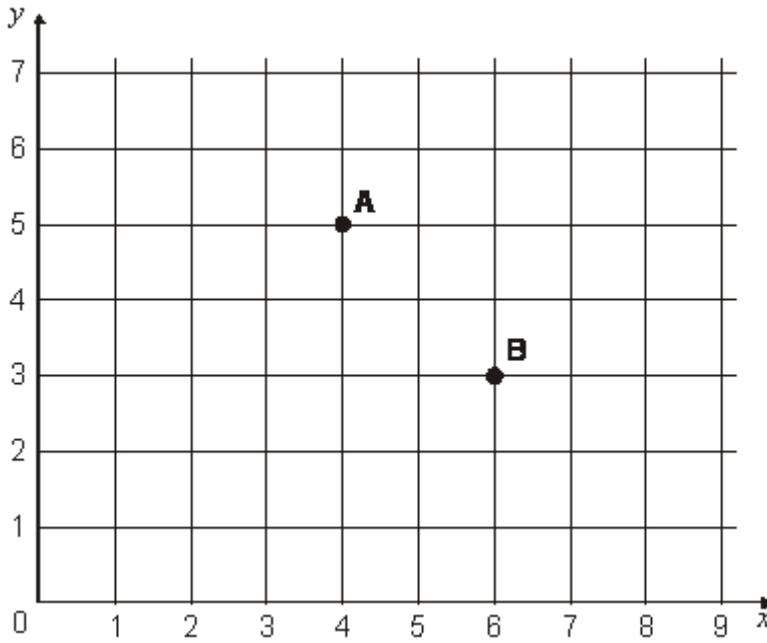
1 mark

(b) How do you know that point (11, 12) would not be on this line?

1 mark

Q2. **A, B, C** and **D** are the vertices of a rectangle.

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

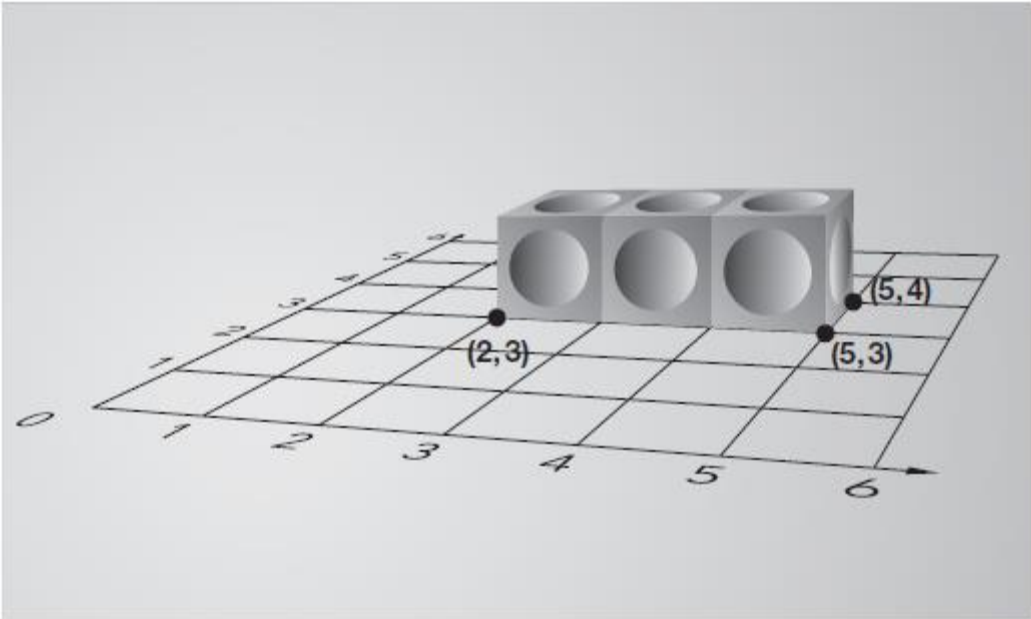


D is the point (3, 4)

Write the coordinates of point **C**.

1 mark

Q3. Alfie places three cubes on a coordinate grid. The base of his shape is a rectangle.



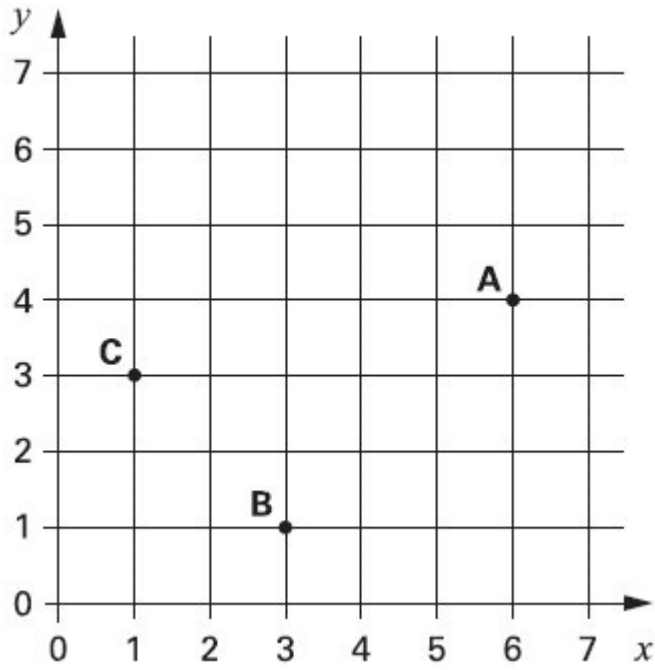
Complete this sentence:

The four **vertices** of the rectangle are

(2, 3), (5, 3), (5, 4) and 


1 mark

Q4.



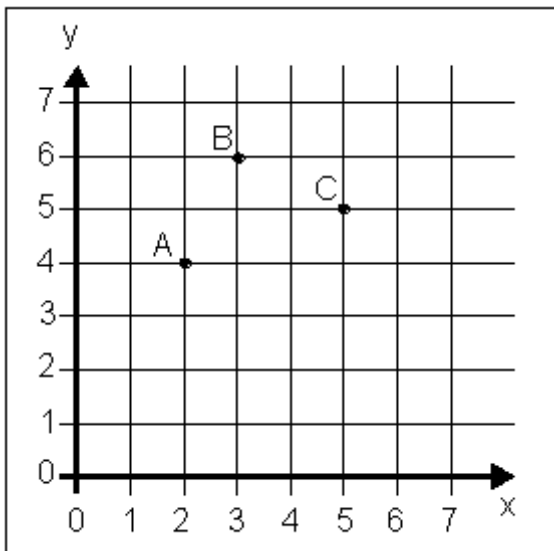
A, B and C are three corners of a rectangle.

What are the coordinates of the fourth corner?

 (,)

1 mark

Q5.



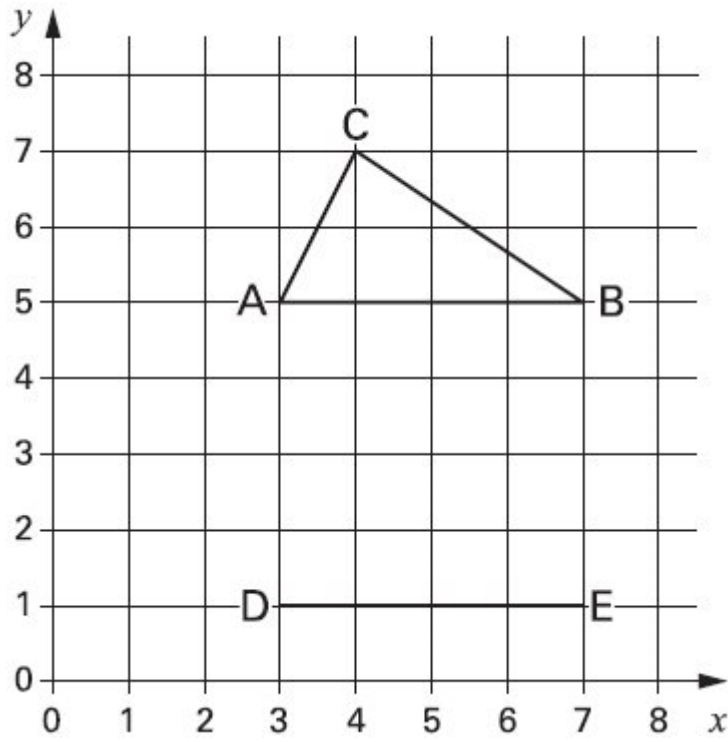
A, B and C are three corners of a **square**.

What are the **co-ordinates** of the **other corner**?

 (,)

1 mark

Q6. Kyle has drawn triangle **ABC** on this grid.



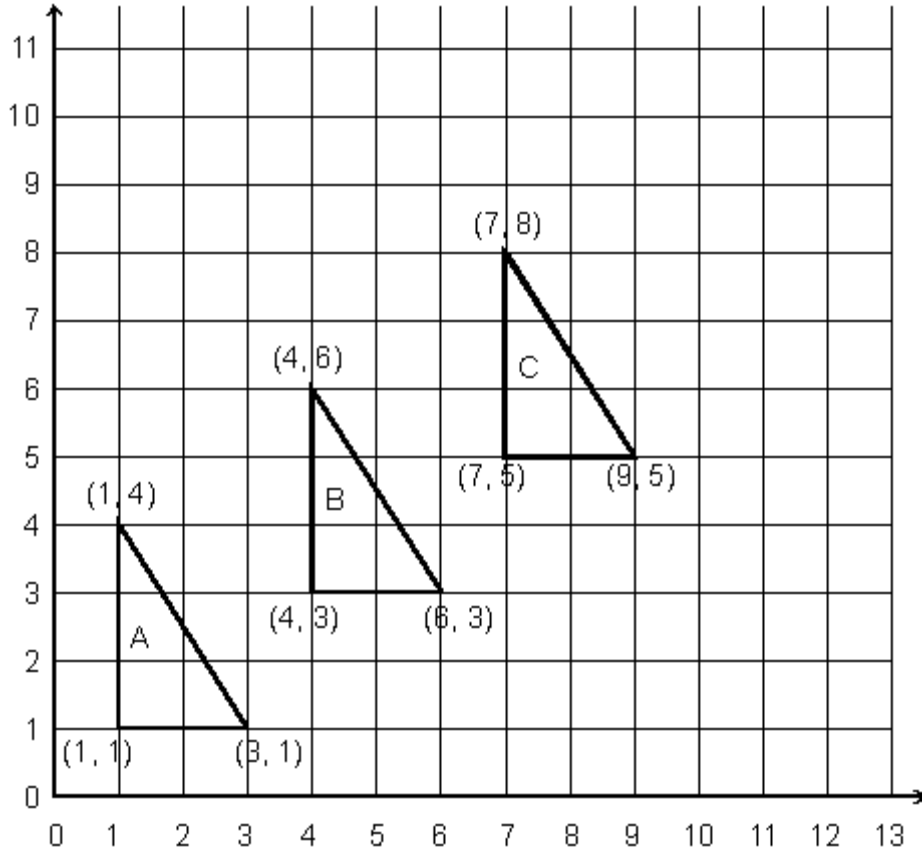
Holly has started to draw an **identical** triangle **DEF**.

What will be the coordinates of point **F**?

(,)

1 mark

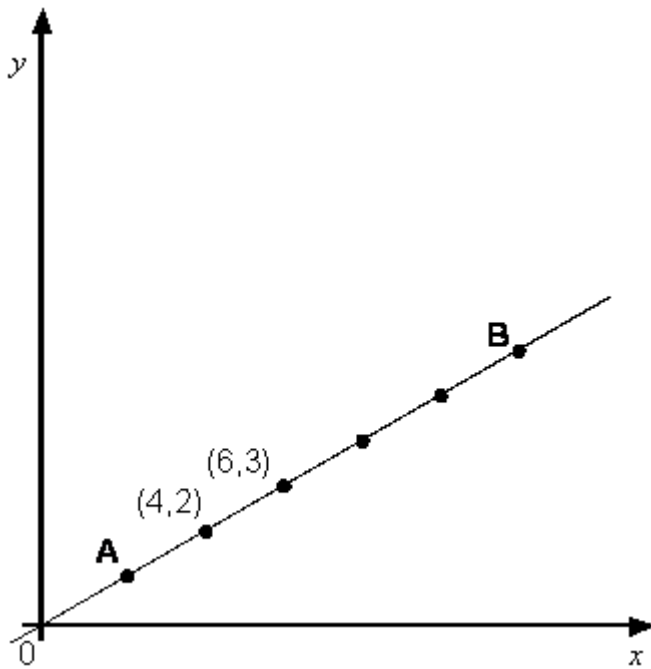
Q7.



Write the co-ordinates of the next triangle in the sequence.

1 mark

Q8. Here is a graph.



The dots (●) on the line are **equally spaced**.

What are the **coordinates** of the point **A**?

(\quad , \quad)

1 mark

Megan says,

'The point B has coordinates (11,5).'

Use the graph to explain why she **cannot** be correct.

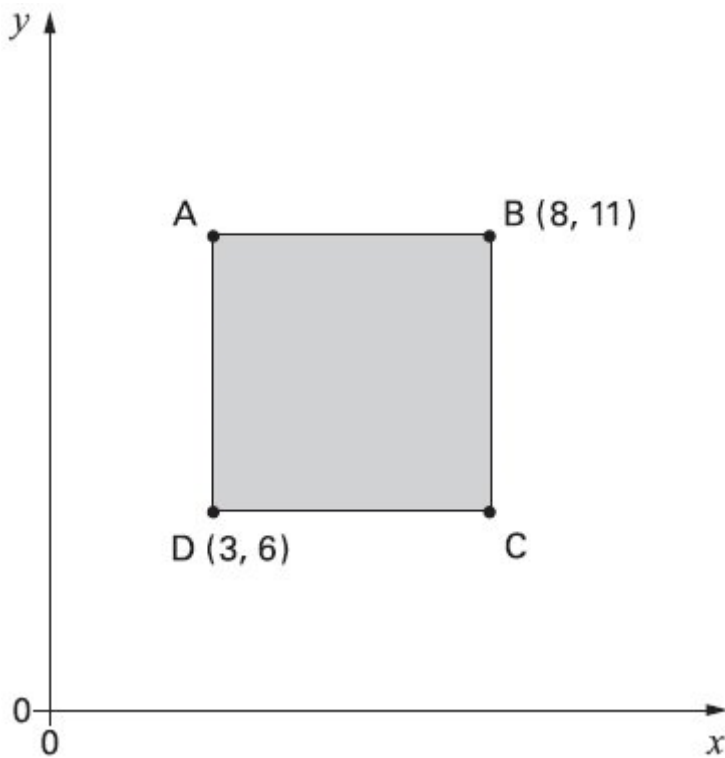
.....

.....

.....

1 mark

Q9. Here is a shaded square.

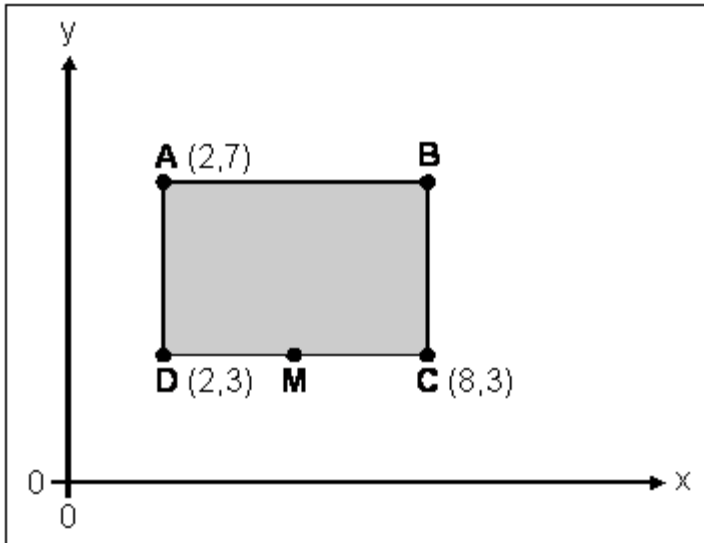


Write the coordinates for point **A**.

$A = (\quad , \quad)$

1 mark

Q10. Here is a shaded **rectangle**.



What are the co-ordinates of **B**?

 (,)

1 mark

M is half way between **D** and **C**.

What are the co-ordinates of **M**?

 (,)

1 mark

M1. (a) ✓ boxes for: (3,2), (5,4) and (10,9).

All three coordinates must be ticked for the mark to be awarded.

1

(b) Explains that (11,12) cannot be on the line because the value of the first number is always one more than the value of the second number in the coordinate, eg (9,8), or similar explanation.

Explanation can use words or diagrams.

1

[2]

M2. (5, 2)

Coordinates must be written in the correct order.

Accept unambiguous answers written on the diagram.

[1]

M3.(2, 4)

[1]

M4. (4, 6)

Both numbers must be correct for the award of the mark.

Accept correct answers written on the diagram with or without brackets.

Coordinates must be written in the correct order.

[1]

M5. (4, 3) *No mark is awarded for (3, 4).
If answer box is blank, accept 4,3 **OR** 4 3 on diagram.* [1]

M6. (4, 3) *Coordinates must be written in the correct order.
Accept (6, 3), (4, -1) or (6-1)
Accept answers written on the diagram, with or without
brackets and commas.* [1]

M7. (10, 7) (12, 7) (10, 10) *All correct, in any order for **1 mark**.* [1]

M8. (a) (2, 1) *Both the numbers must be correct and in the correct order.
Accept (2, 1) on diagram with or without comma and
brackets.*

(b) Explanation which either implies that **B** has the coordinates (12, 6) **OR** that (11, 5) cannot be on the line because of the general relationship between the points, eg:

- 'Because it's 12, 6'
- 'If you count up in 2's and 1's it doesn't come to 11, 5'
- 'The first numbers are always even'
- 'First should be twice the second number'

Do not accept arbitrary or vague reasons, such as:

'She miscounted';

'Because the bottom line doesn't go up to 11';

'Because it's in a pattern'.

1

[2]

M9. (3, 11)

Coordinates must be written in the correct order.

Accept correct answer written on the diagram, with or without brackets or commas.

[1]

M10. (a) (8, 7) **Do not** accept (7, 8).

Accept co-ordinates written on diagram with or without commas and brackets, eg:

- **(8 7)**
- **8 7**
- **8,7**

1

(b) (5, 3) **Do not** accept (3, 5).

Accept co-ordinates written on diagram with or without

commas and brackets, eg:

- **(5 3)**
- **5 3**
- **5,3**

1

[2]