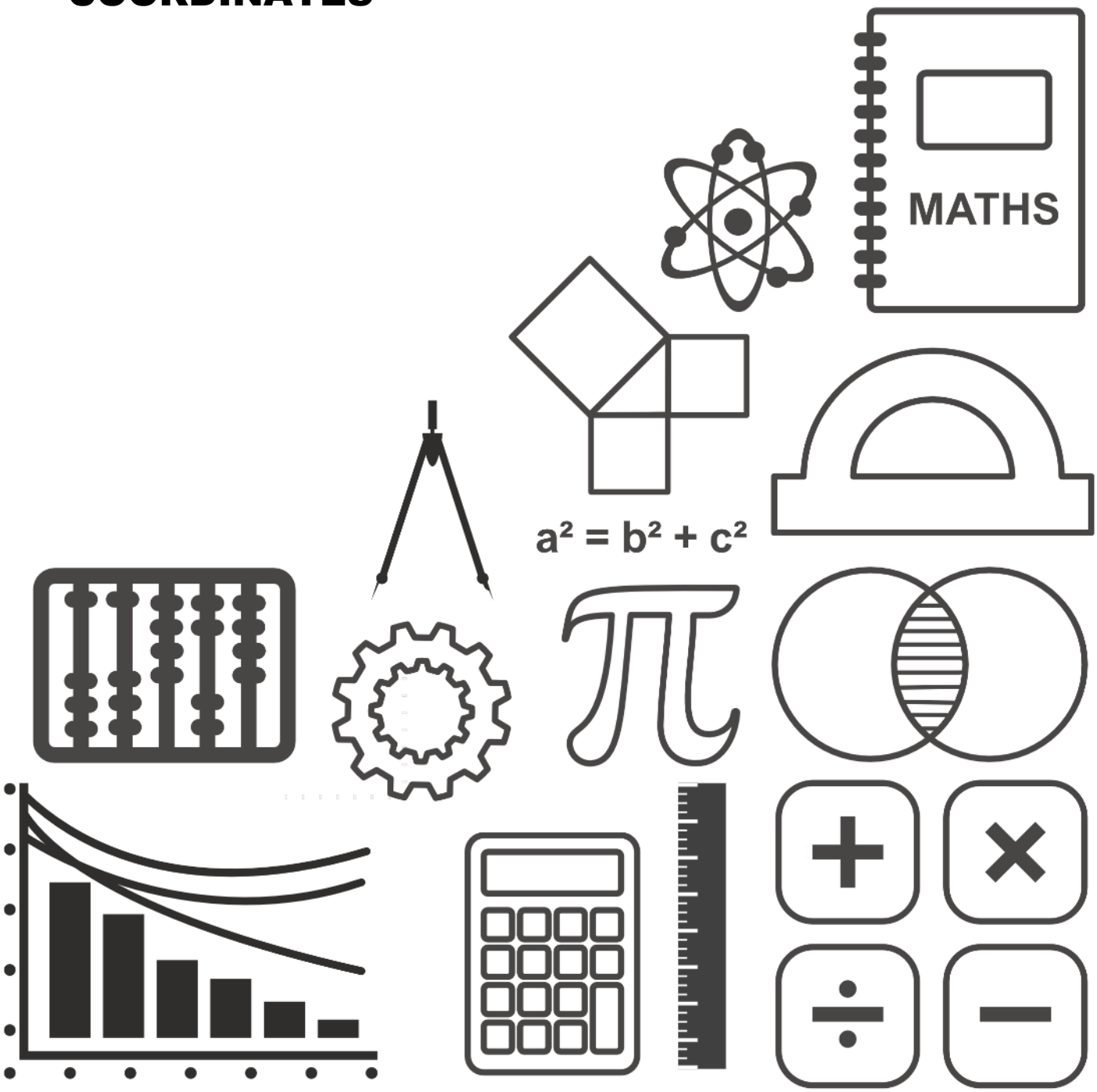
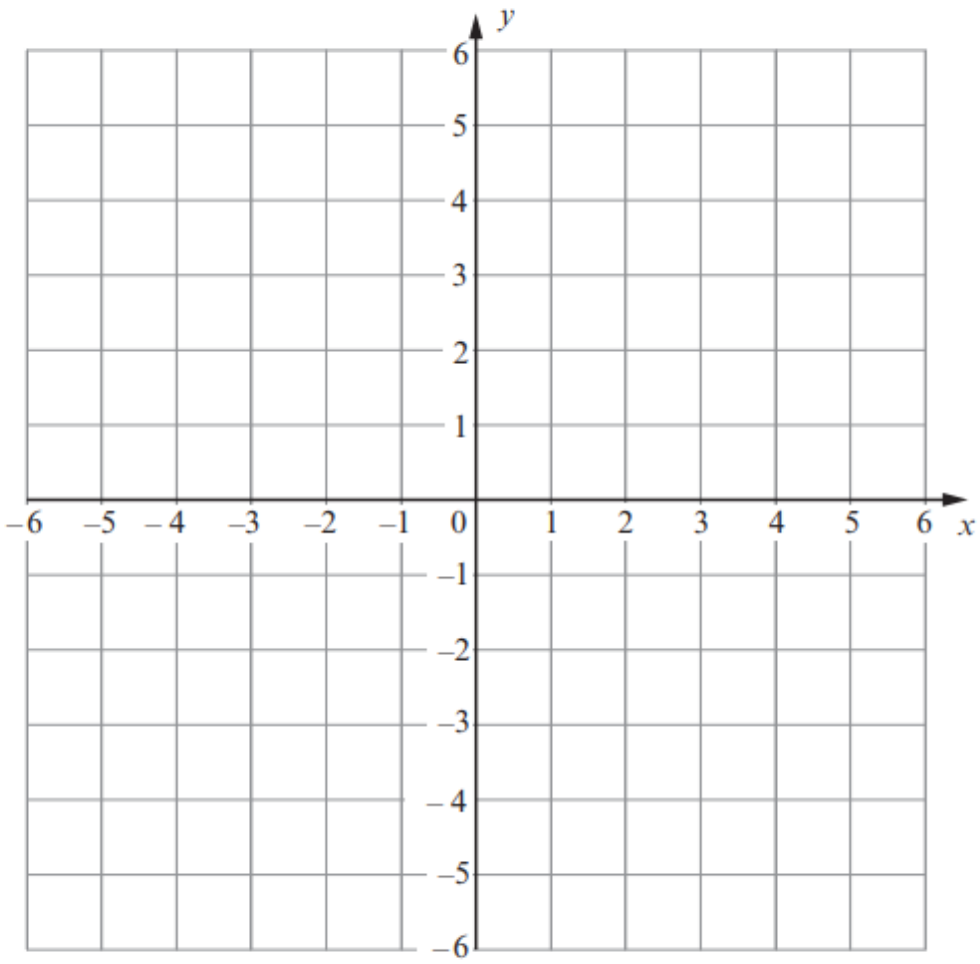
MATHSDIY

GCSE TOPIC BOOKLET
COORDINATES



1.

On the squared paper below, plot the points $A(6, -5)$, $B(-2, -4)$ and $C(-3, 3)$.



[3]

2.

The x and y values of the coordinates of the points (2, 6), (3, 9), (4, 12) ..... , (x, y) all follow the same rule.
Write down the rule connecting x and y.

.....

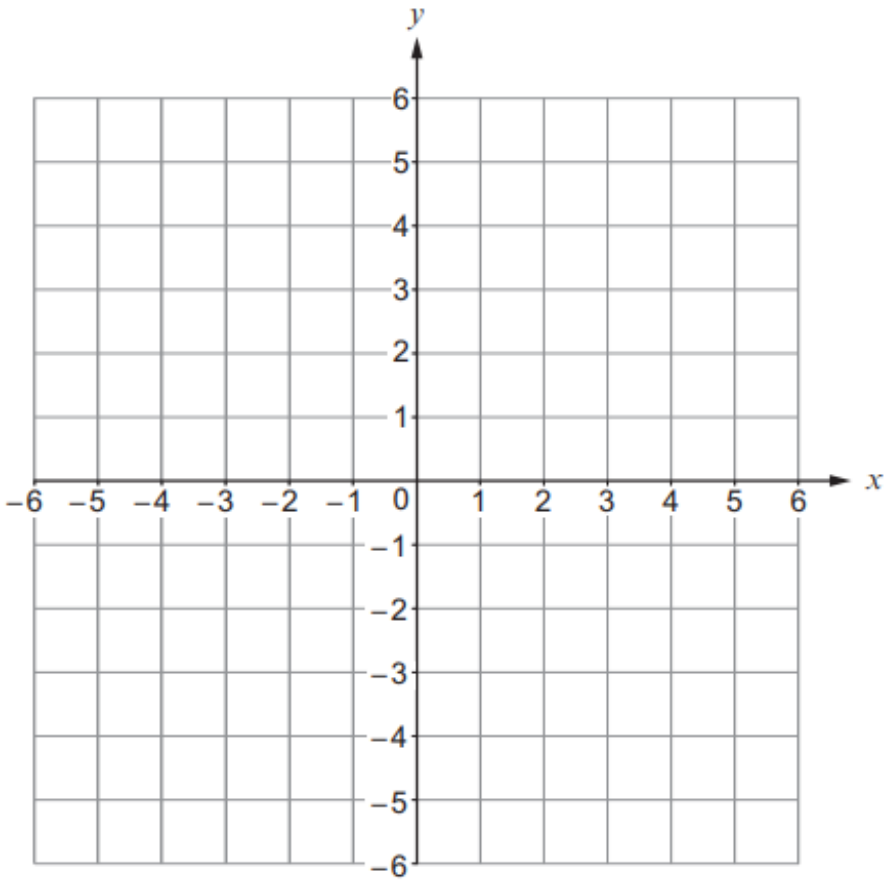
.....

.....

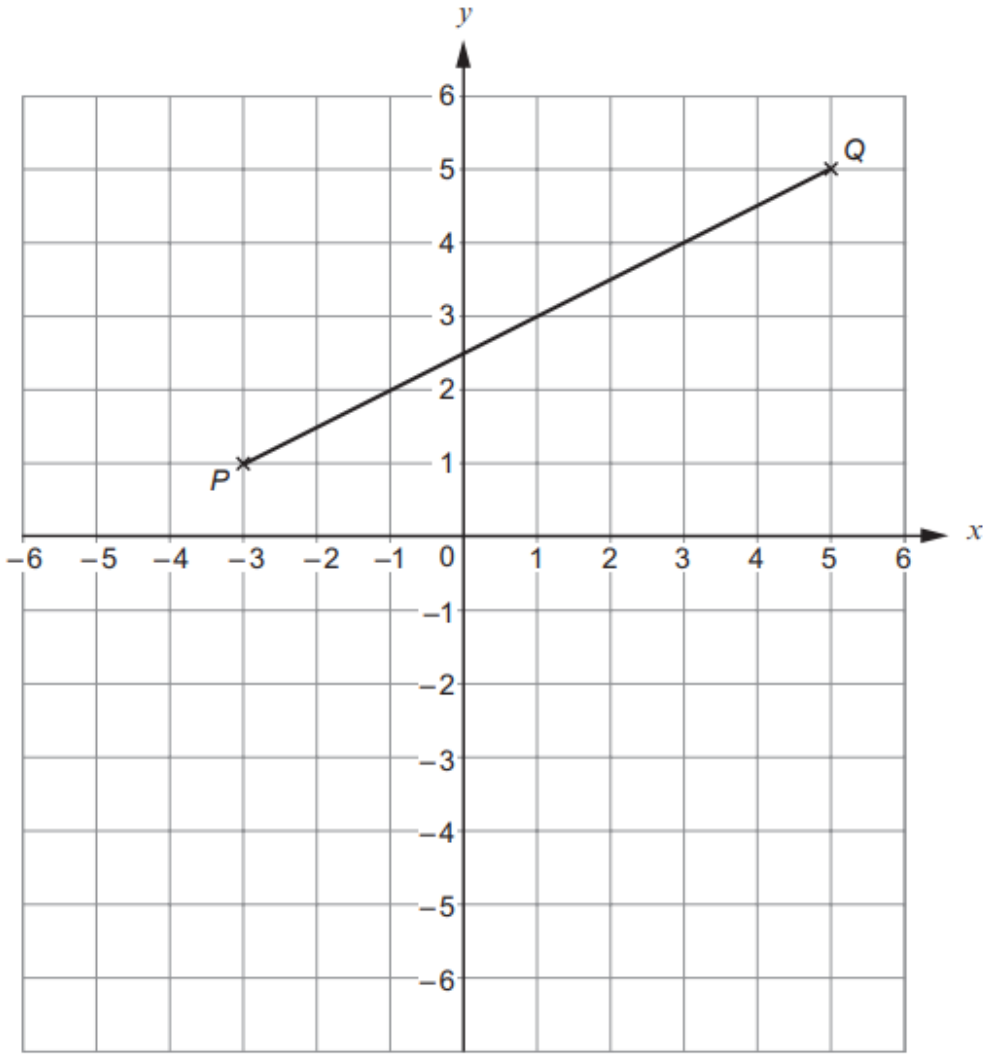
(2)

3.

On the squared paper below, plot the points $A(5, 2)$, $B(-1, -5)$ and $C(-4, 3)$. [3]



4.



(a) Write down the coordinates of the point *P*. [1]

(..... , ...)

(b) The point *R* lies on the line *PQ*.
The y-coordinate of *R* is 4.
What is the x-coordinate of the point *R*? [1]

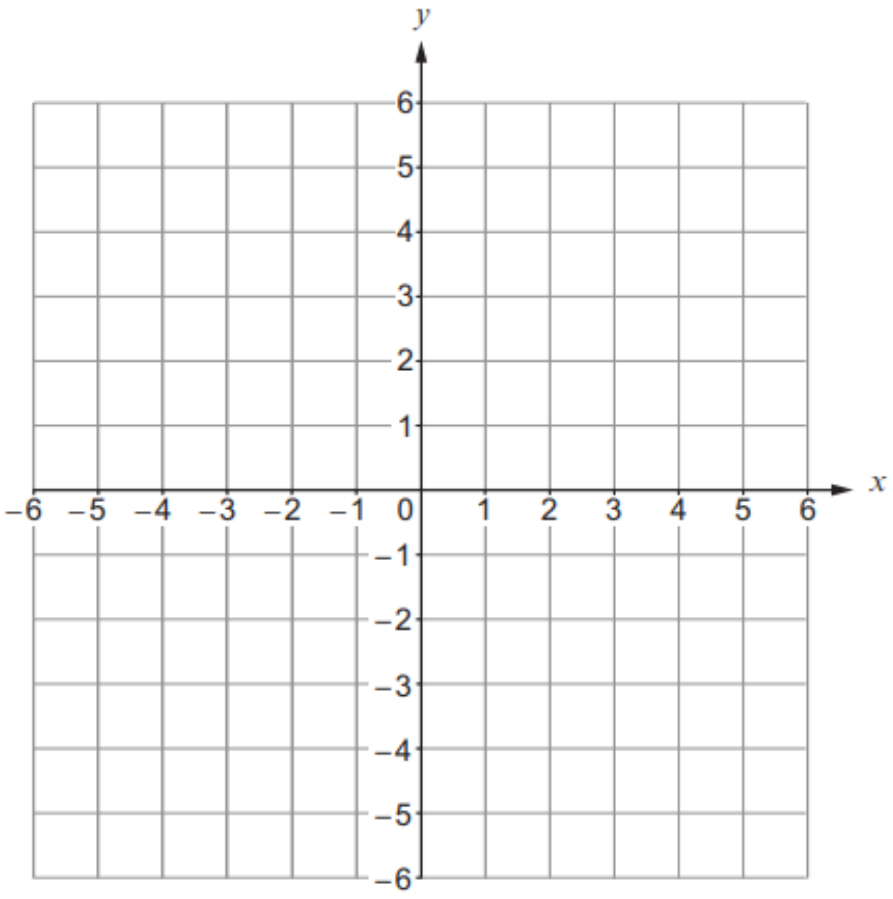
x-coordinate = ...

(c) The coordinates of the point (1, 3) add up to 4.
Write down the coordinates of the point on *PQ* which add up to 1. [2]

(..... , ...)

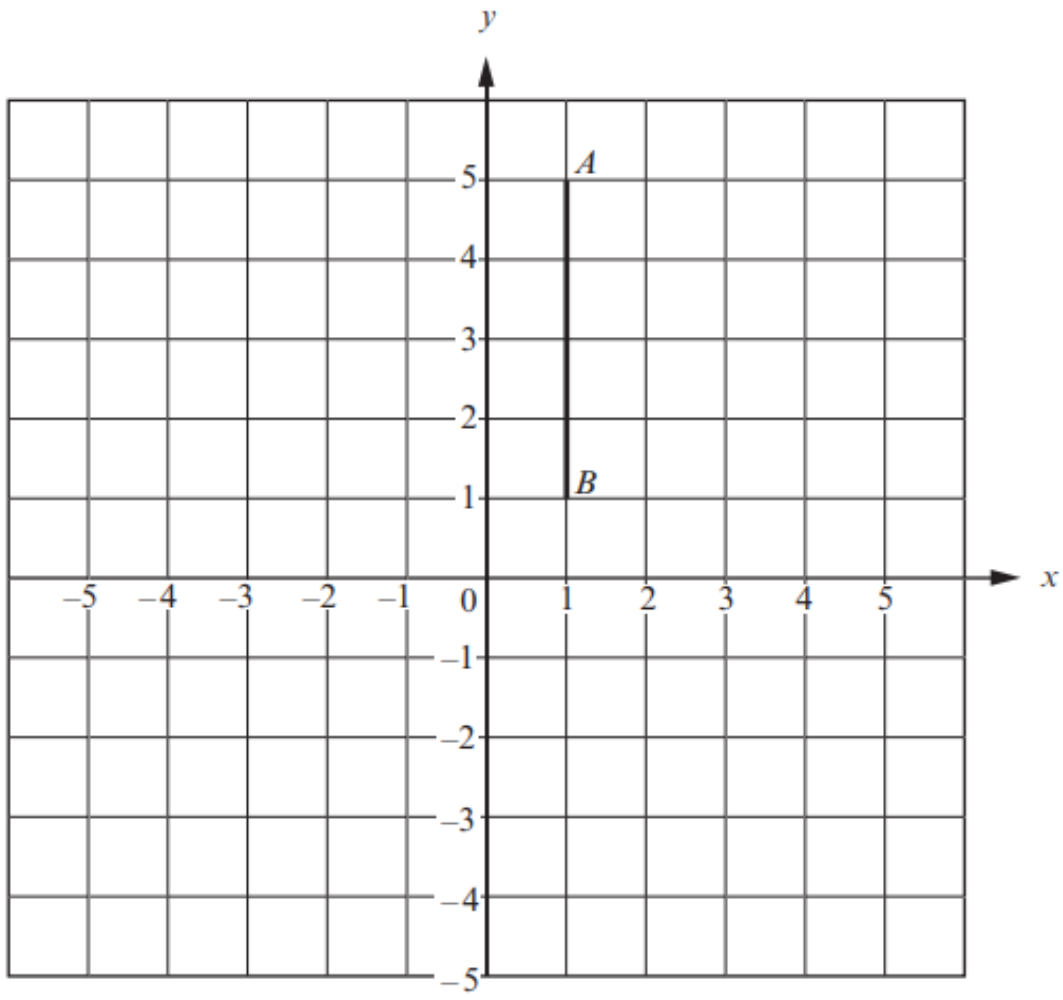
5.

On the squared paper below, plot the points $A(-4, 2)$, $B(-1, -5)$ and $C(4, 3)$. [3]



6.

AB is one of the two equal sides of a right-angled isosceles triangle ABC.
Find all possible positions for the point C and write down their coordinates.



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(4)

7.

The diagram shows 2 identical parallelograms and the coordinates of four vertices.
Find the coordinates of the vertices marked A, B and C.

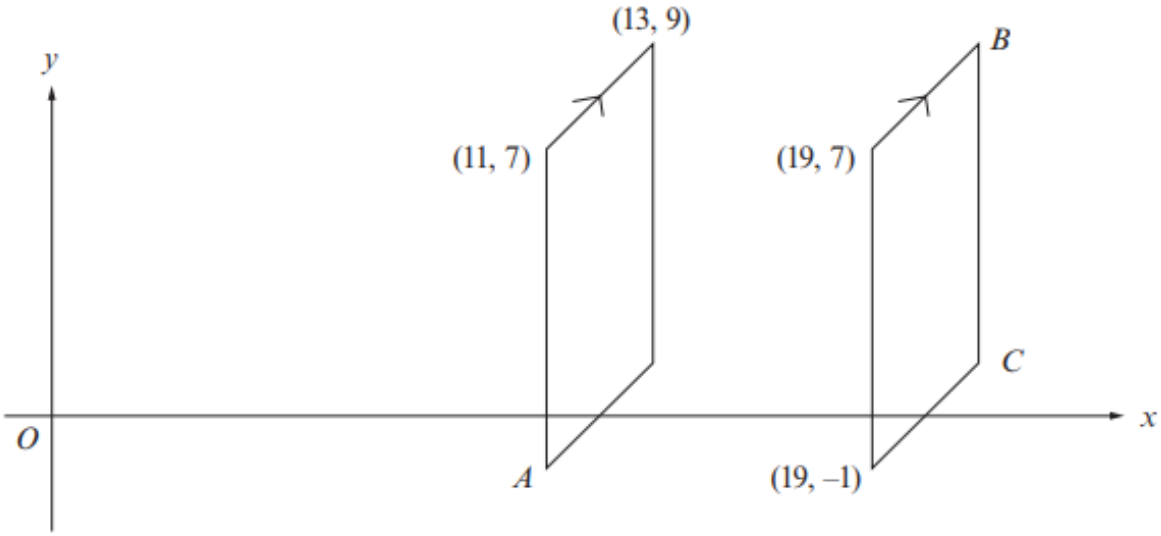

Diagram not drawn to scale

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.....

A (..... , ...) B (..... , ...) C (..... , ...)

[6]

8.

The diagram shows 2 identical rectangles and 2 identical parallelograms.
The coordinates of four vertices are shown on the diagram.

Find the coordinates of the vertices marked A, B and C.

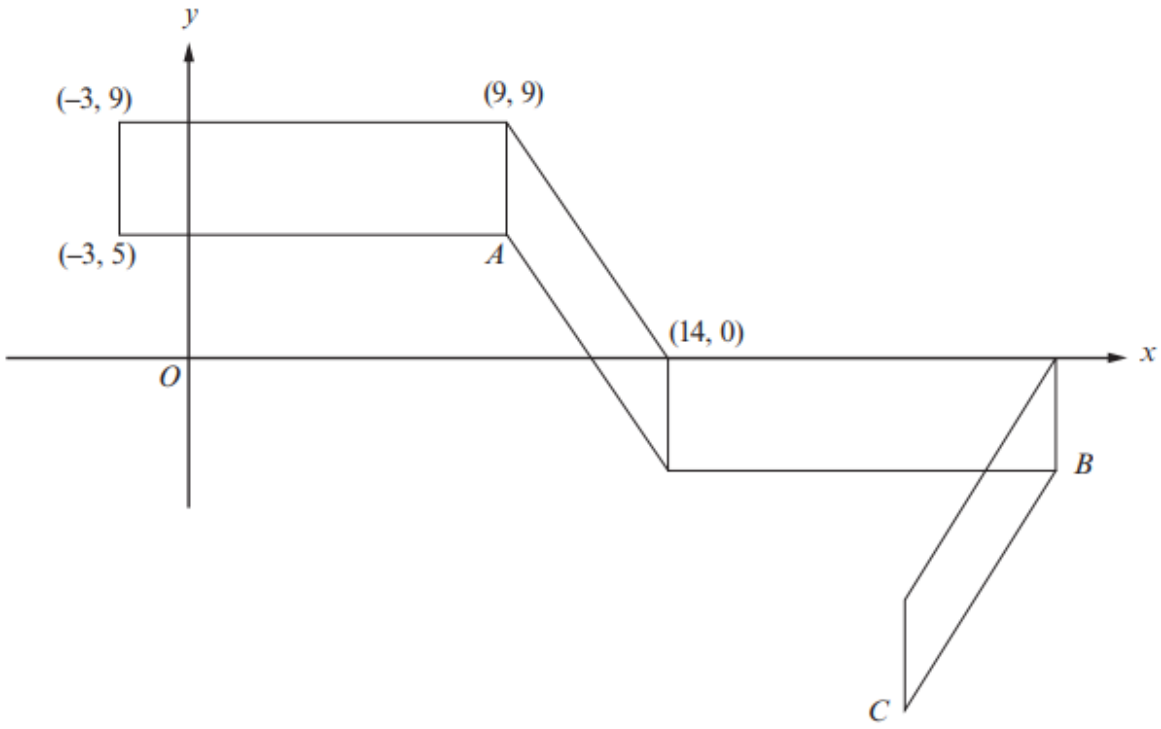

Diagram not drawn to scale

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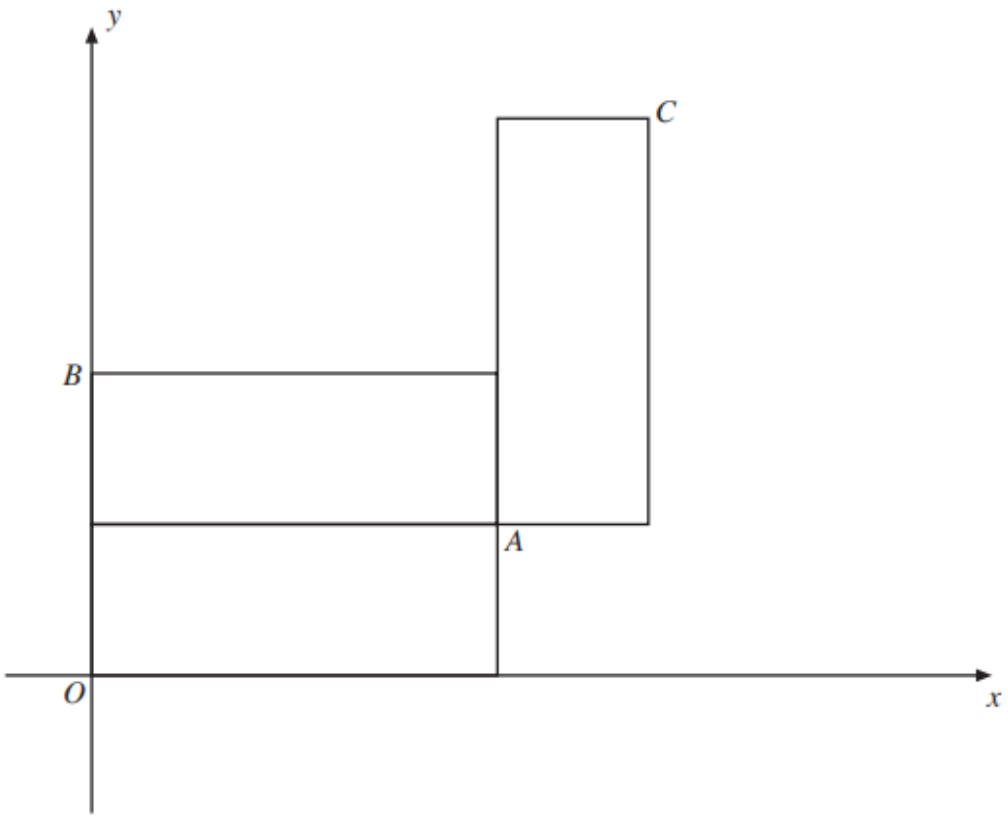
A (..... , ...) B (..... , ...) C (..... , ...) [6]

9.

The diagram below shows 3 rectangles each of which is 12 units by 4 units.



Find the coordinates of the points A, B and C.

The coordinates of A are (..... , ...)

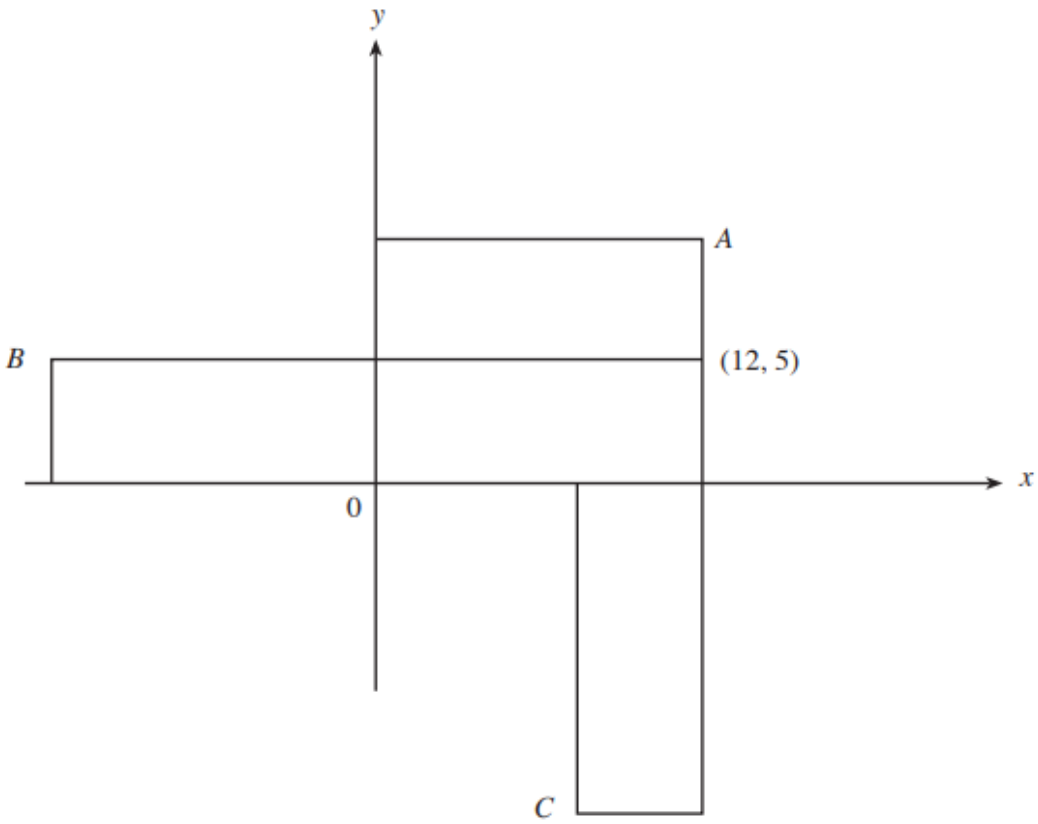
The coordinates of B are (..... , ...)

The coordinates of C are (..... , ...)

[6]

10.

The diagram below shows four identical rectangles.



Find the coordinates of the points A, B and C.

The coordinates of A are (,)

The coordinates of B are (,)

The coordinates of C are (,)

[6]