



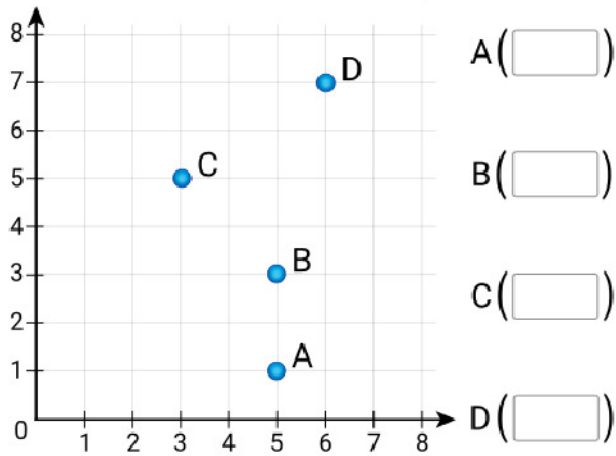
SUMMIT EDUCATION

Mathematics

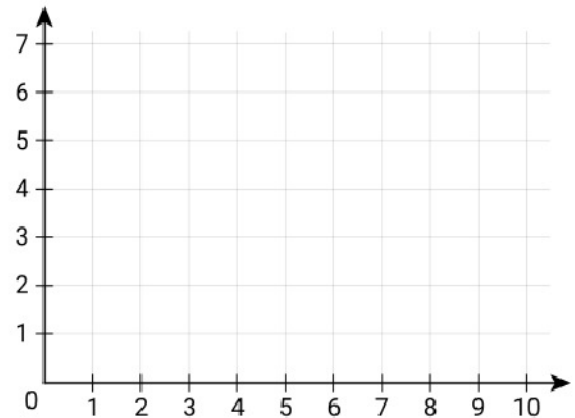
Worksheet

Q1

Write the coordinates of the points shown.



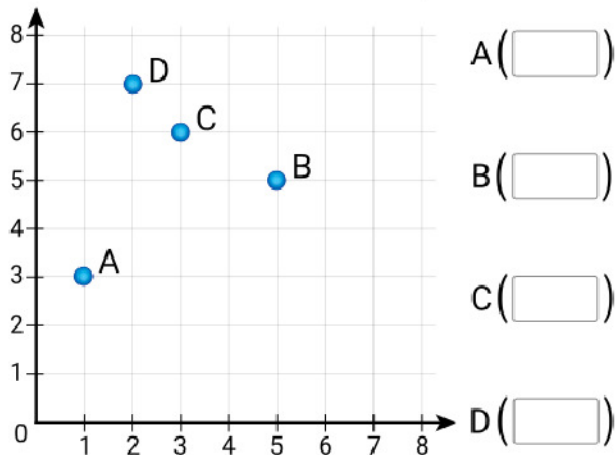
Q4



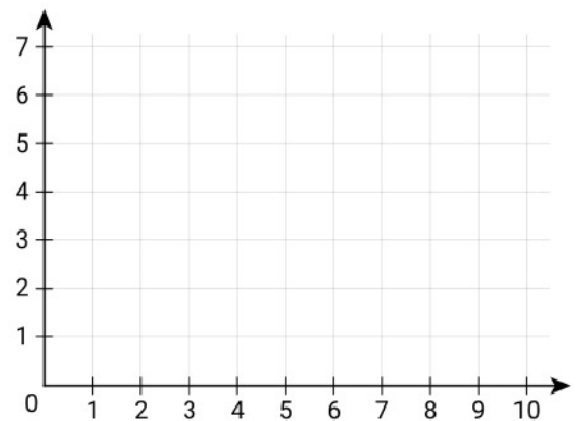
Plot the points: (1,2) (5,5) (9,2)

Q2

Write the coordinates of the points shown.



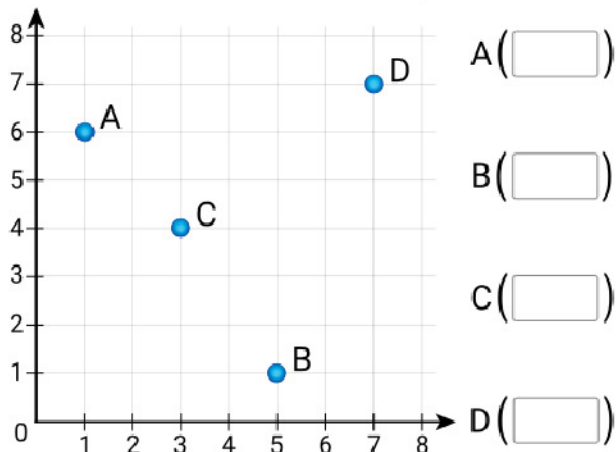
Q5



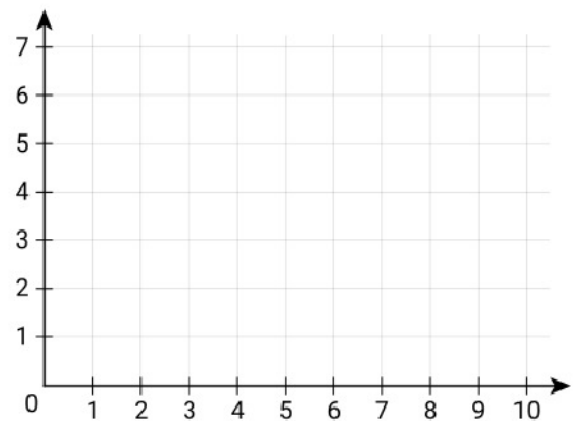
Plot the points: (1,3) (4,4) (6,1)

Q3

Write the coordinates of the points shown.

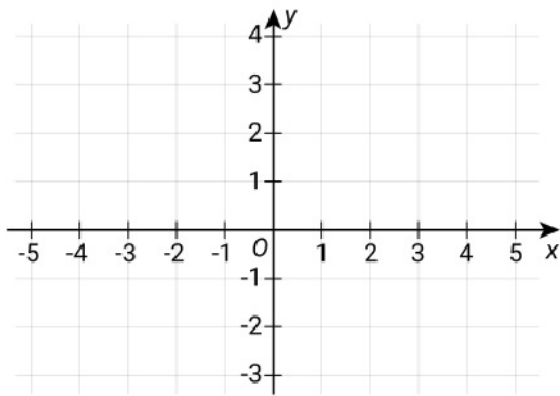


Q6



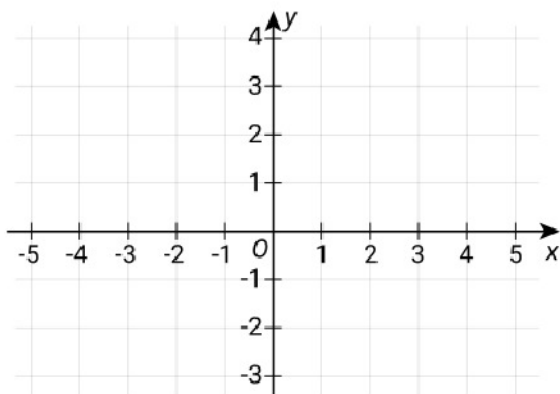
Plot the points: (1,4) (4,3) (7,4)

Q7



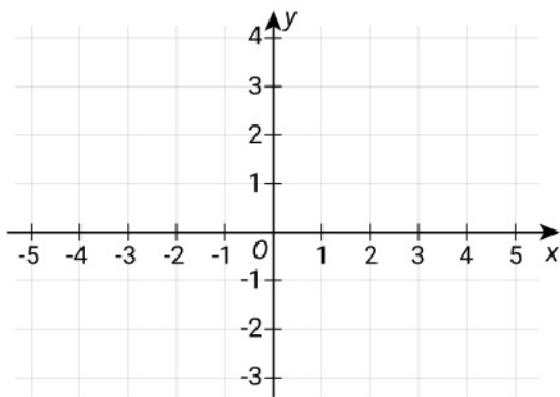
Plot the points: (1,4) (4,3) (-1,2)

Q8



Plot the points: (1,4) (1,3) (-1,3)

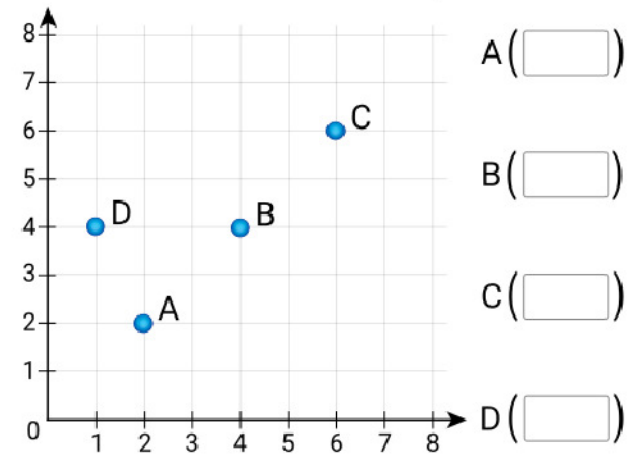
Q9



Plot the points: (5,1) (3,0) (-5,4)

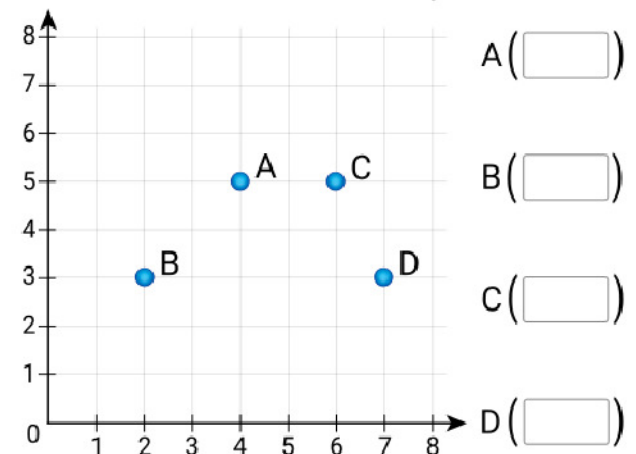
Q10

Write the coordinates of the points shown.



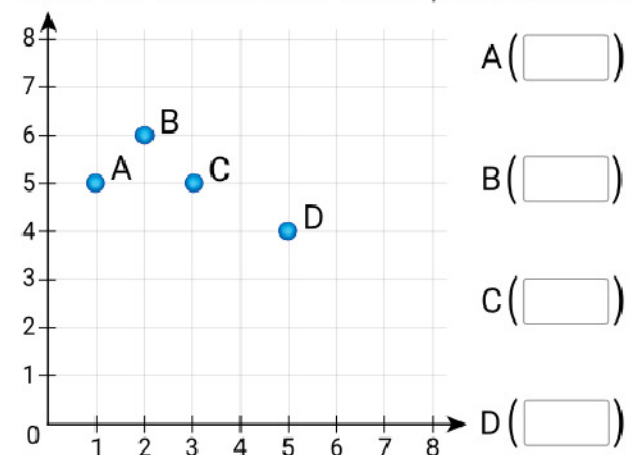
Q11

Write the coordinates of the points shown.



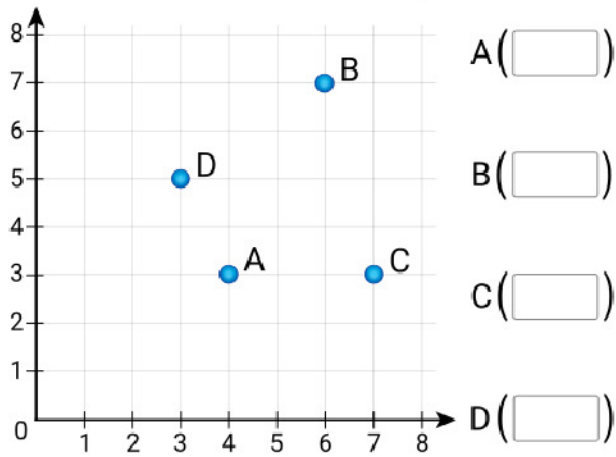
Q12

Write the coordinates of the points shown.

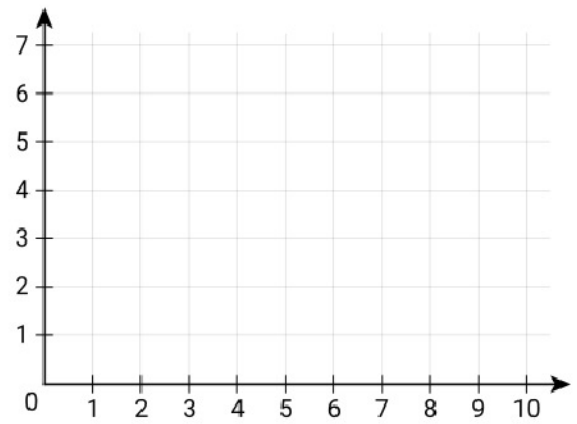


Q13

Write the coordinates of the points shown.

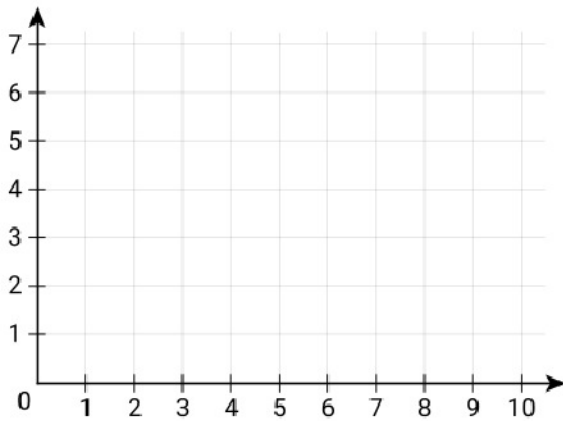


Q16



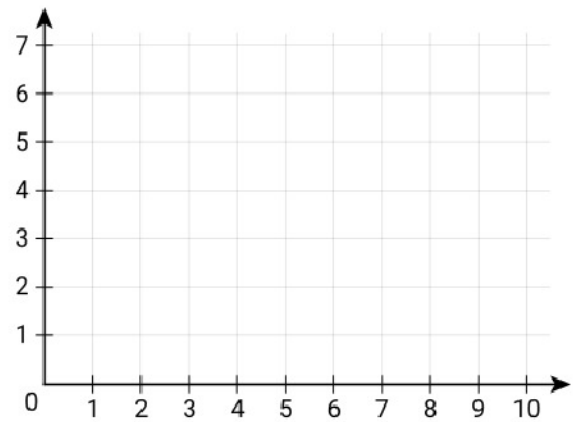
Plot the points: (2,3) (6,1) (10,3)

Q14



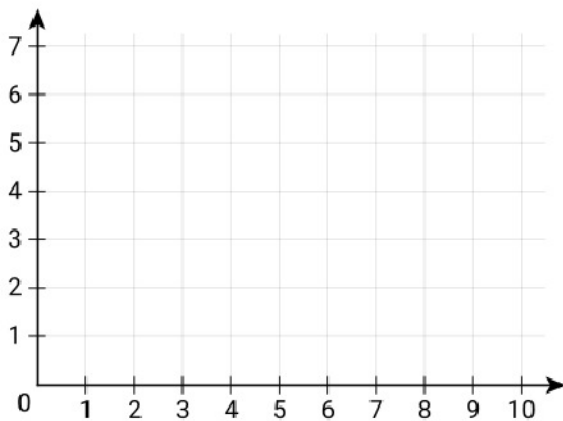
Plot the points: (2,3) (4,5) (8,3)

Q17



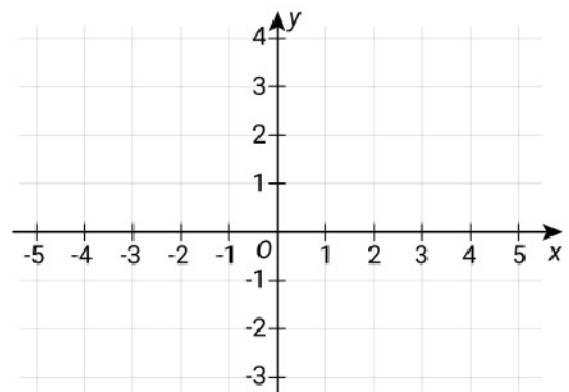
Plot the points: (2,4) (6,2) (10,2)

Q15



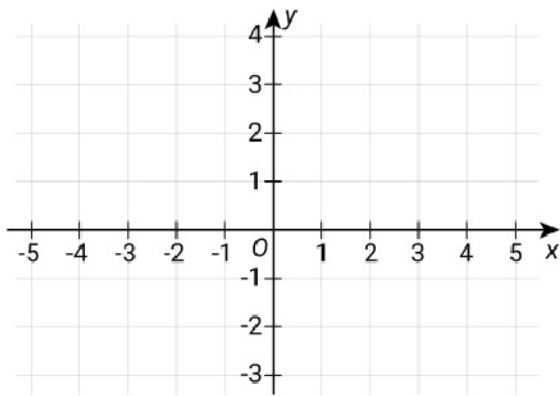
Plot the points: (2,2) (3,2) (5,4)

Q18



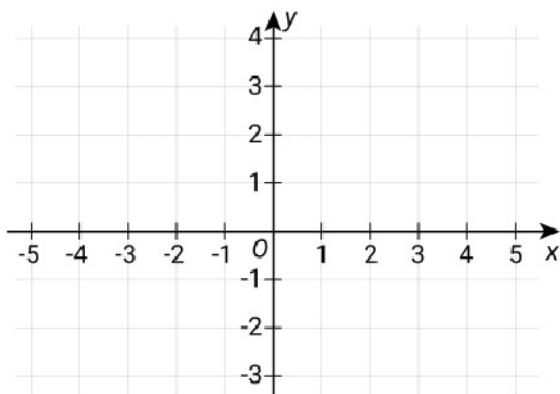
Plot the points: (5,2) (1,-3) (-3,4)

Q19



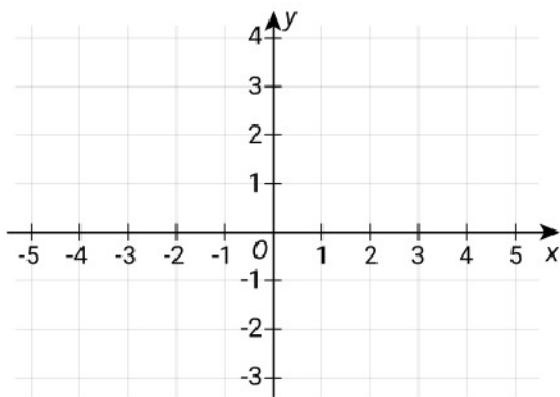
Plot the points: $(1,3)$ $(5,-3)$ $(-3,3)$

Q20



Plot the points: $(2,4)$ $(4,-1)$ $(-2,2)$

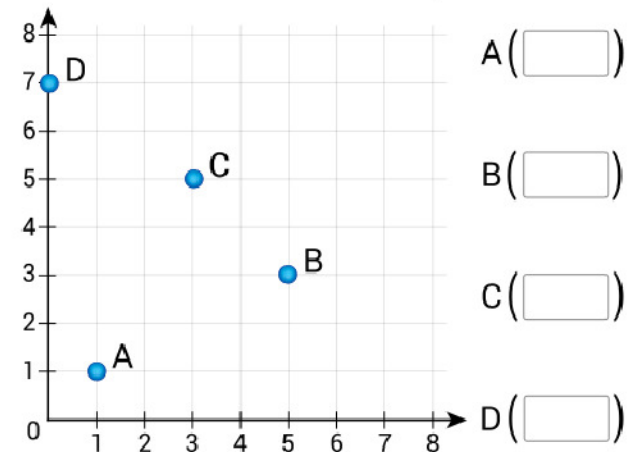
Q21



Plot the points: $(5,3)$ $(1,-2)$ $(-1,3)$

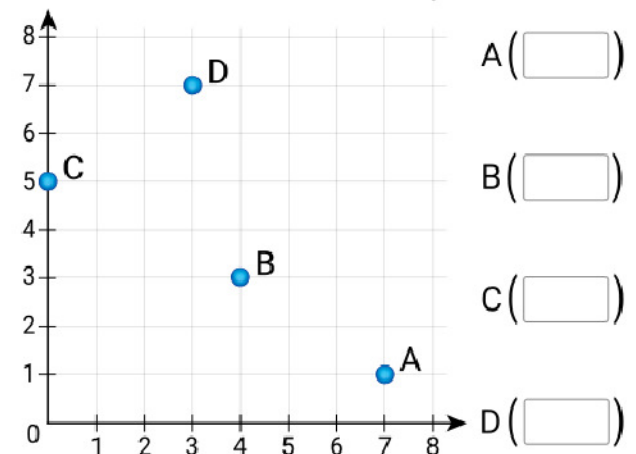
Q22

Write the coordinates of the points shown.



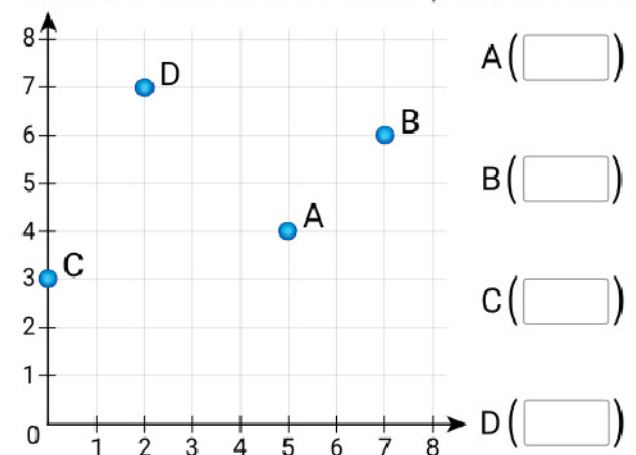
Q23

Write the coordinates of the points shown.



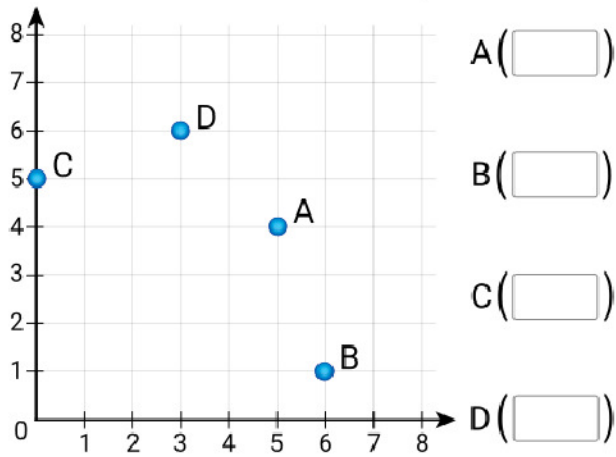
Q24

Write the coordinates of the points shown.

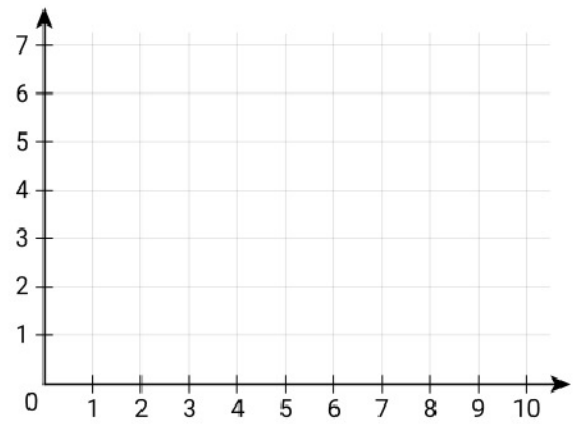


Q25

Write the coordinates of the points shown.

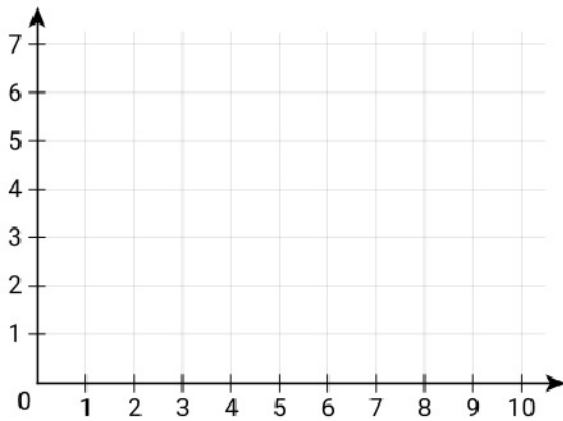


Q28



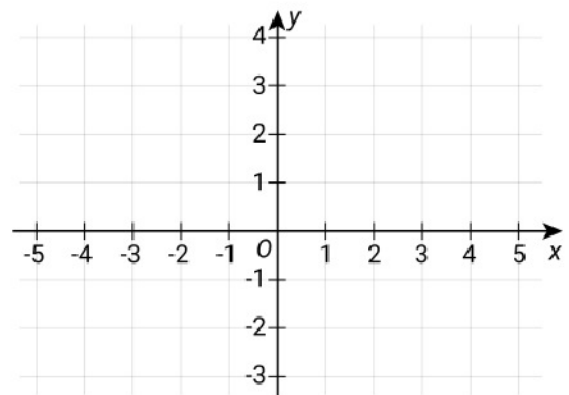
Plot the points: (3,3) (6,2) (8,3)

Q26



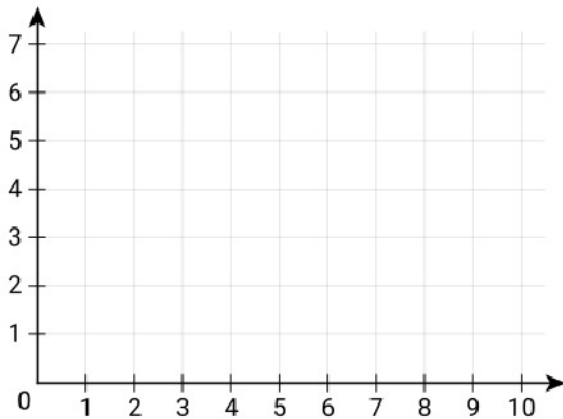
Plot the points: (3,1) (6,2) (9,7)

Q29



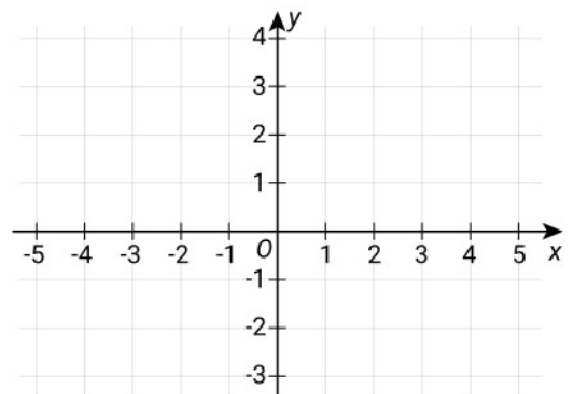
Plot the points: (0,4) (4,-1) (-5,-2)

Q27



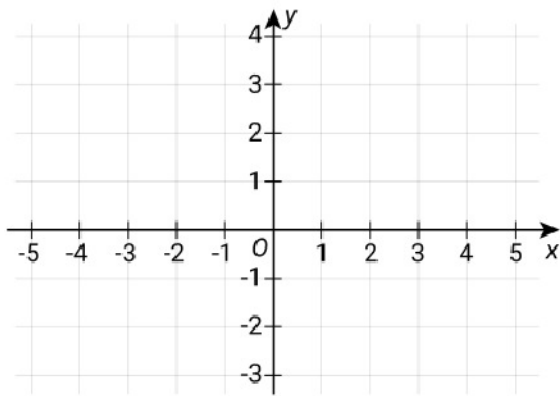
Plot the points: (3,2) (5,1) (8,7)

Q30



Plot the points: (4,0) (4,-3) (-3,-3)

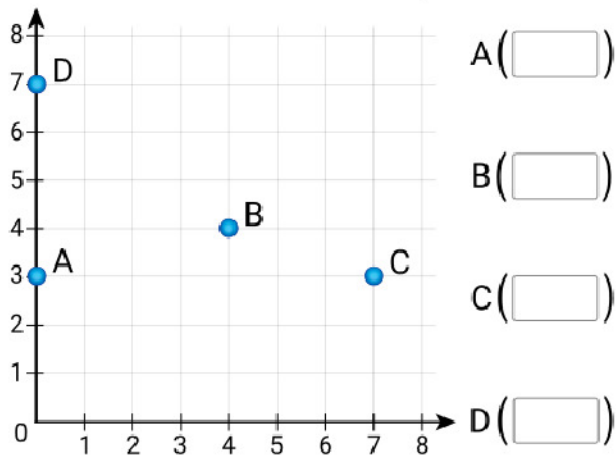
Q31



Plot the points: $(3,0)$ $(3,-1)$ $(-2,-2)$

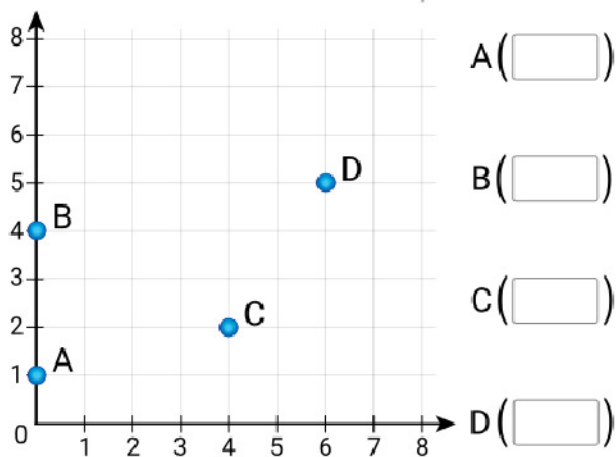
Q32

Write the coordinates of the points shown.



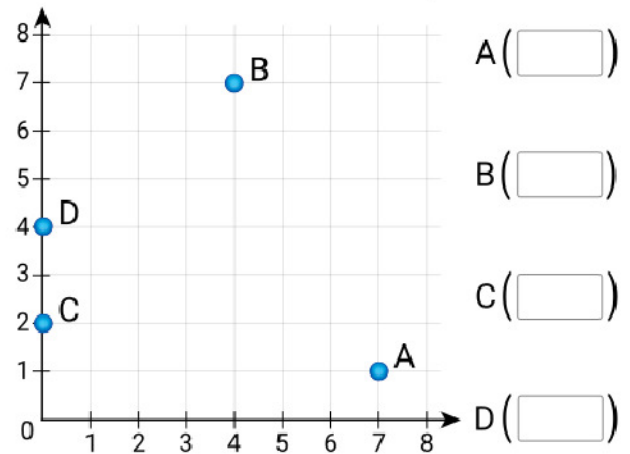
Q33

Write the coordinates of the points shown.

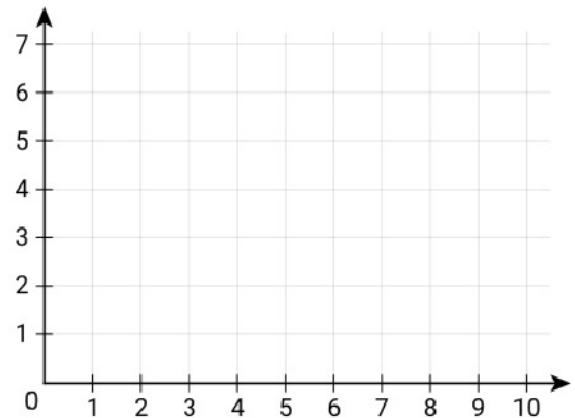


Q34

Write the coordinates of the points shown.

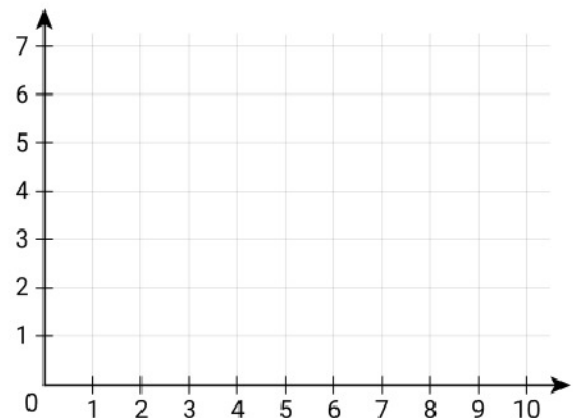


Q35



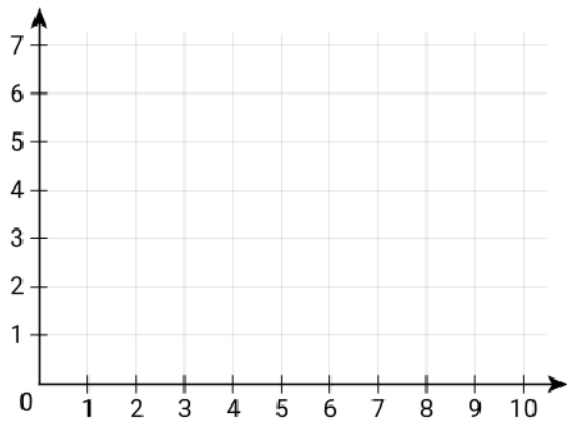
Plot the points: $(0,3)$ $(7,6)$ $(10,0)$

Q36



Plot the points: $(0,1)$ $(5,3)$ $(6,0)$

Q37



Plot the points: $(0,1)$ $(6,2)$ $(9,0)$

Q38

Choose **ALL** the true facts.

- ☐ $(1,2)$ lies in the 1st quadrant.
- ☐ $(-7,4)$ lies in the 4th quadrant.
- ☐ $(-1,2)$ lies in the 2nd quadrant.

Q39

Choose **ALL** the true facts.

- ☐ $(7,4)$ lies in the 1st quadrant.
- ☐ $(3,0)$ lies on the x-axis.
- ☐ $(-5,1)$ lies in the 3rd quadrant.

Q40

Choose **ALL** the true facts.

- ☐ $(-2,0)$ lies on the y-axis.
- ☐ $(4,0)$ lies on the x-axis.
- ☐ $(-6,8)$ lies in the 2nd quadrant.

y6maths2 Hard

15 Difficult Worded Problems

Show all working out in the space provided.

Name: _____ Date: _____ Score: ____ / 15

Question 1:

A point is located 4 units right and 3 units up from the origin. What are its coordinates? If it moves 2 units left and 5 units down, what are its new coordinates?

Working out:

Question 2:

Plot the points A(2,3), B(5,3), C(5,6), D(2,6) and connect them in order. What shape is formed? Calculate its perimeter if each unit is 1 cm.

Working out:

Question 3:

A triangle has vertices at P(1,2), Q(7,2), and R(4,6). What is the area of this triangle? Show your method using the Cartesian plane.

Working out:

Question 4:

A square has one corner at (3,4) and side length 5 units. If the square is axis-aligned, list all four vertices.

Working out:

Question 5:

Point M is at $(-3, 5)$ and Point N is at $(4, -2)$. How many units does it take to travel from M to N moving only horizontally and vertically?

Working out:

Question 6:

A rectangle has vertices at $(2, 1)$, $(2, 7)$, $(10, 1)$, and $(10, 7)$. What is its area? If you reflect it over the y-axis, what are the new coordinates?

Working out:

Question 7:

A point has coordinates $(-5, -3)$. Name the quadrant it is in. If reflected over the x-axis then the y-axis, where does it end up?

Working out:

Question 8:

Two points A $(3, 8)$ and B $(3, 2)$ are plotted. What is the distance between them? Find the midpoint coordinates.

Working out:

Question 9:

A line segment has endpoints $(0,0)$ and $(8,6)$. Calculate its exact length using the Pythagorean theorem.

Working out:

Question 10:

An L-shaped polygon has vertices at $(2,2)$, $(2,8)$, $(6,8)$, $(10,8)$, $(10,2)$, back to $(2,2)$. Find its area.

Working out:

Question 11:

A point at $(6,9)$ is rotated 90° clockwise around the origin. What are its new coordinates?

Working out:

Question 12:

A parallelogram has vertices at $(1,1)$, $(4,3)$, $(7,1)$, and $(10,3)$. Find its base length, height, and area.

Working out:

Question 13:

A map uses a scale where 1 unit = 2 km. A straight path goes from (2,3) to (8,15). How far is the actual path in km?

Working out:

Question 14:

Plot points: (-2,3), (0,7), (2,11), (4,15). Describe the pattern. What are the coordinates of the 10th point?

Working out:

Question 15:

Point X is at (-2,-6) and Y is at (4,-1). Find the midpoint. Give one possible coordinate for Z to form an isosceles triangle with XY as the base.

Working out:
