

Identify and draw lines that are parallel to the axes

1 Which statement is correct? Tick your answer.

The x -axis and y -axis are perpendicular to each other.

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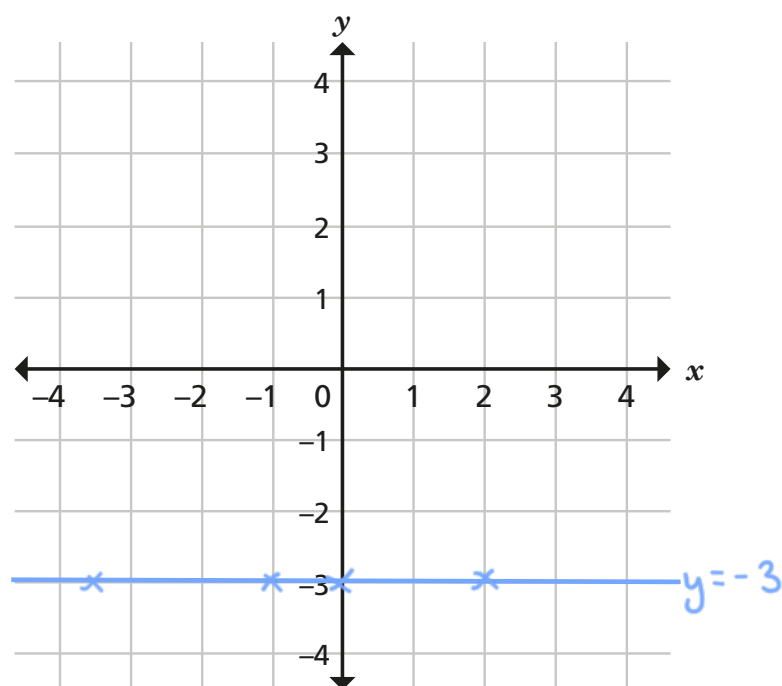
The x -axis and y -axis are parallel to each other.

☐

2 Here is a blank coordinate grid.

a) Plot these points and draw lines to join them.

$(2, -3), (0, -3), (-1, -3), (-3.5, -3)$



b) Complete the sentences.

All of the y -coordinates are

-3

They join to make the line $y =$

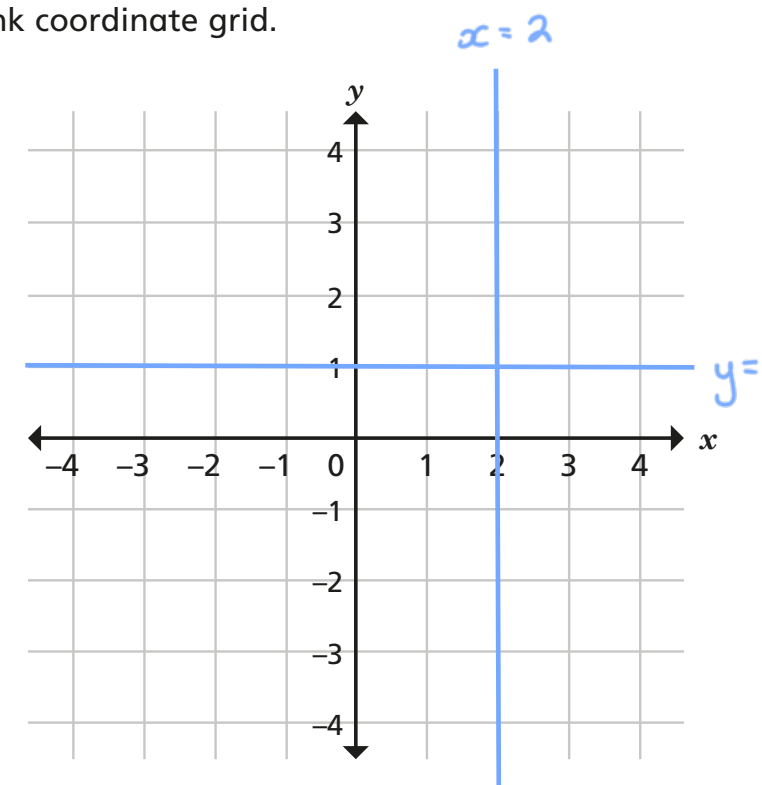
-3

c) Write the coordinates of three points that lie on the line $y = 8$

$(0, 8)$ $(-11, 8)$ $(0.6, 8)$

3

Here is a blank coordinate grid.



a) Draw the line $x = 2$ on the grid.

b) Write the coordinates of three points that lie on your line.

$(2, 1)$ $(2, 2)$ $(2, 3)$

How do these tell you that your line is correct?

All of the x -coordinates are equal to 2

c) Write the coordinates of a point on the line $x = 2$ that you cannot see on the grid.

$(2, 74)$

d) Draw the line $y = 1$ on the same grid.

e) Write the coordinates of the point where the lines $x = 2$ and $y = 1$ intersect.

$(2, 1)$

4

The point $(-5, 9)$ lies on which of these lines?

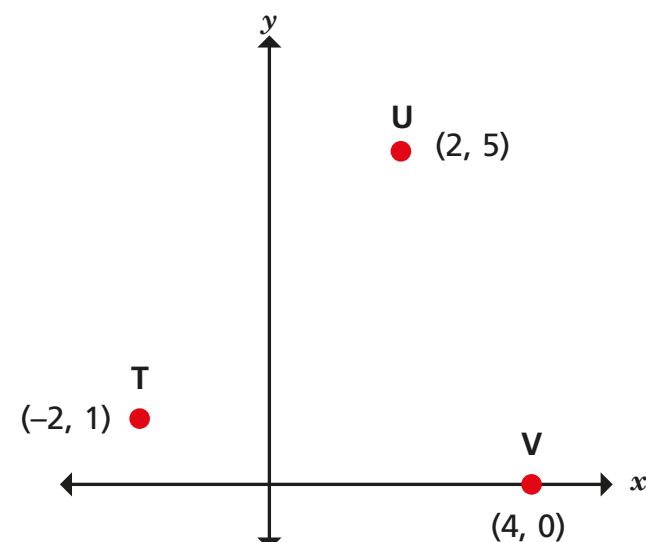
$y = -5$ ☐

$x = -5$ ☒

$x = 9$ ☐

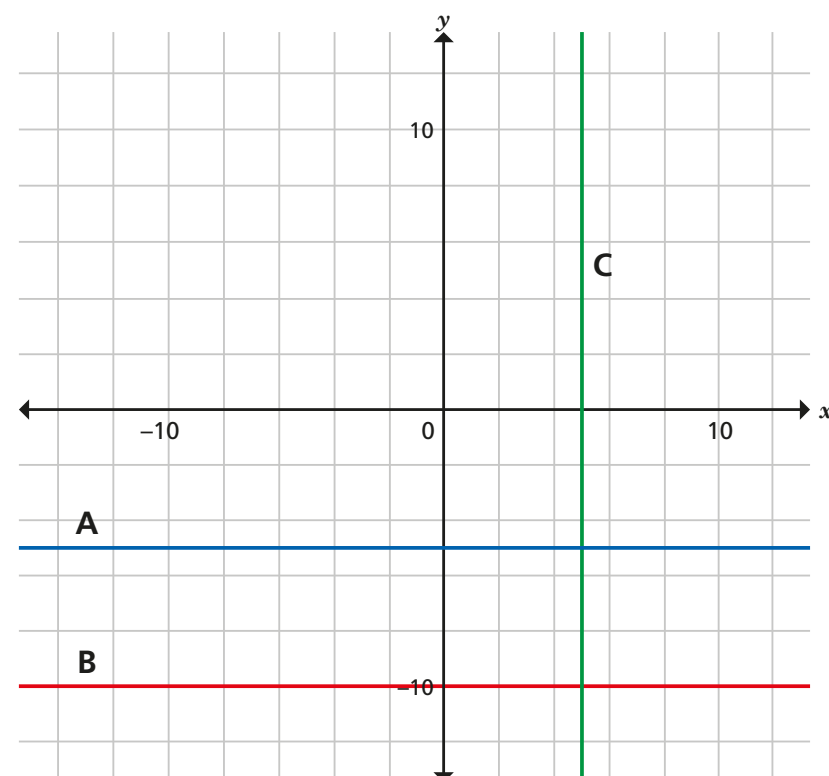
$y = 9$ ☒

- 5 The points T, U and V are shown.
Tick the points that satisfy the statements in the table.



Statement	T	U	V
Above $y = 4$		✓	
Left of $x = -1$	✓		
Below $y = 0.5$			✓

- 6 The graph shows 3 straight lines: A, B and C.



- a) Which two lines are parallel to each other? A and B
b) Which line is parallel to the y-axis? C
c) What is the equation of line A? $y = -5$
d) What is the equation of line C? $x = 5$

- 7 Which of these lines are parallel to the x-axis?

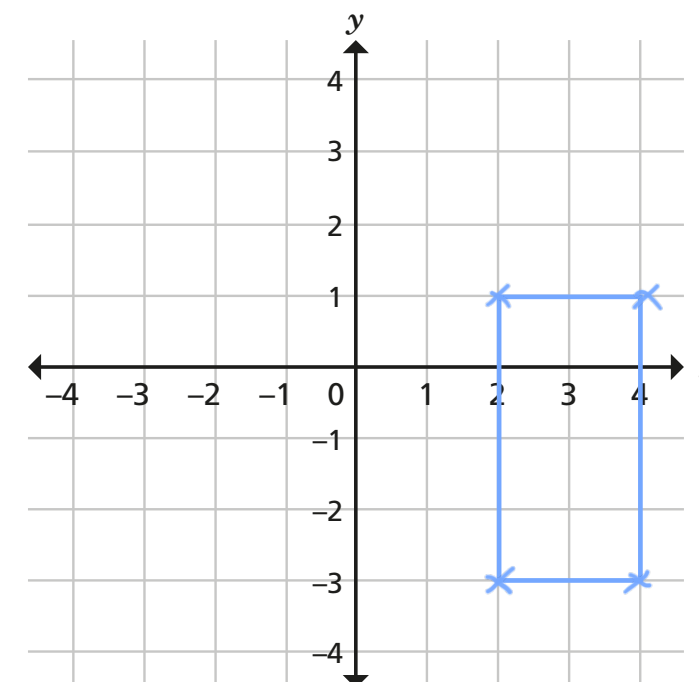
$x = 0$ ☐

$6 = y$ ☒

$6y = 2$ ☒

$3y + 8 = 0$ ☒

- 8 Here is a blank coordinate grid.



- a) Plot the points (2, -3), (4, -3), (2, 1) and (4, 1).
Join them to make a rectangle.
- b) Write the equations for the two lines of symmetry of the rectangle.
 $y = -1$ and $x = 3$
- c) What are the coordinates of the centre of the rectangle?
(3 , -1)