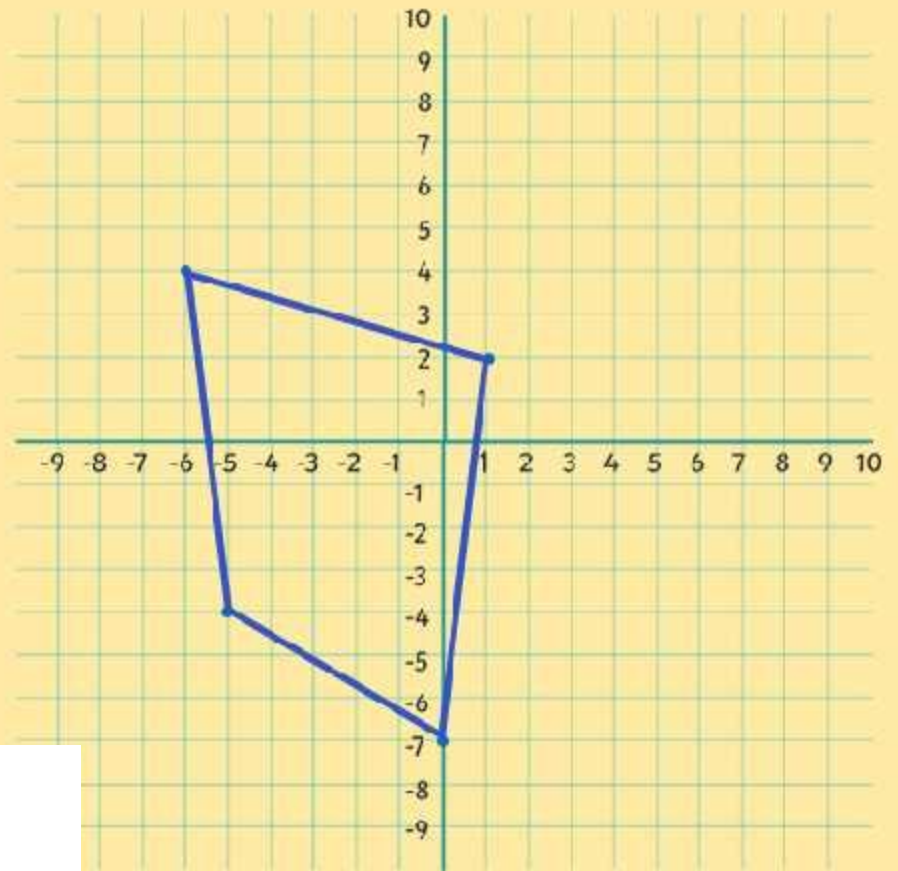
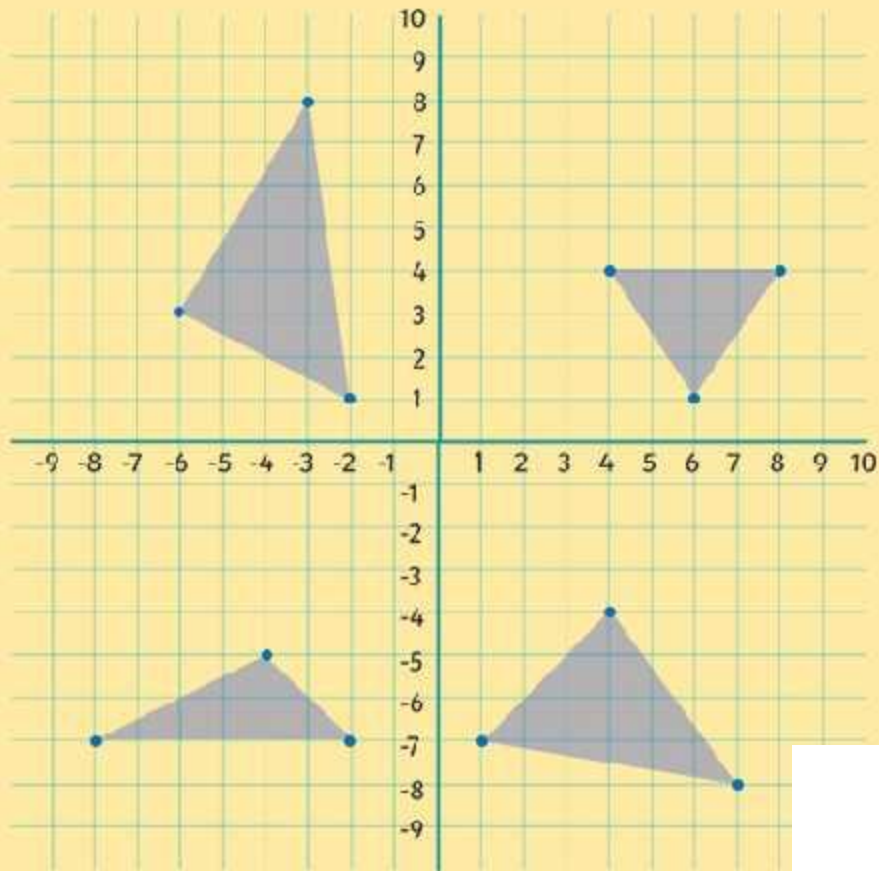


Cartesian Plane



Who Do We Have to Thank?



A French mathematician, named René Descartes, (1596-1650) made using coordinates to identify a point on a grid, into a formal and popular method.

He also developed algebra and geometry (shape and space).

He is famous for saying:

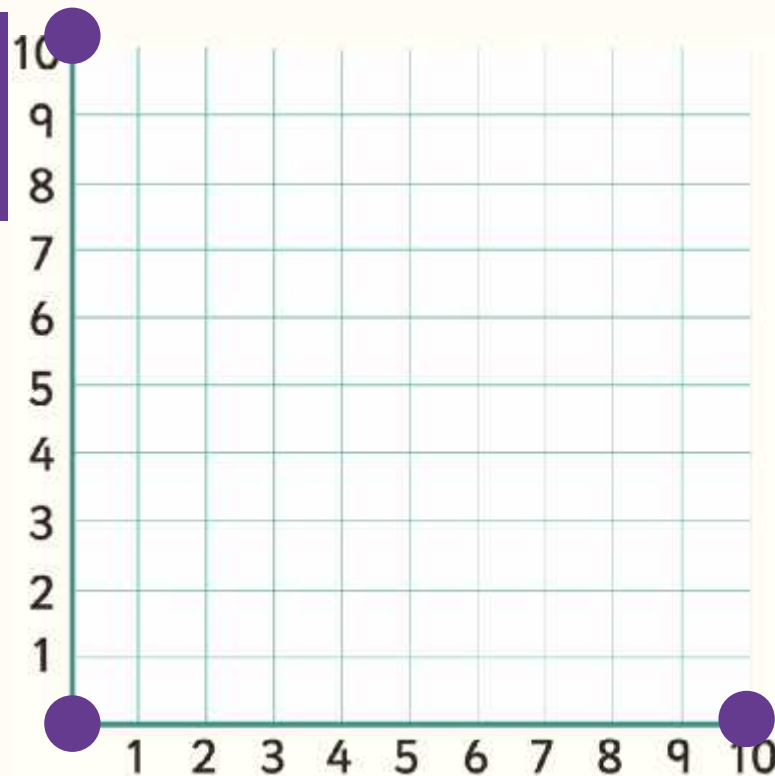
“In my opinion, all things in nature occur mathematically.”

Parts of a Grid

Here is a simple grid, also known as a Cartesian Plane.
Click the hotspots to find out more!

This is the y-axis. It is always the vertical one.

This point (0,0) is also called the origin.



This is the x-axis. It is always the horizontal one.

Parts of a Grid

Here is a simple grid, also known as a Cartesian Plane.
Click the hotspots to find out more!

This is the y-axis. It is always the vertical one.

This is the 2nd quadrant. Points here have a negative x value and a positive y value such as $(-7,5)$.

This is the 3rd quadrant. Points here have a negative x and y values such as $(-3,-5)$.

The point $(0,0)$ is still called the origin.

This is the 1st quadrant.

This is still the vertical y-axis. This goes from 10, right down to -10.

This is the 4th quadrant. Points here have a positive x and negative y values such as $(6,-4)$.

Parts of a Grid

Shape A has been translated **3 squares to the right** and **4 squares down to show shape B.**

Can you work out the coordinates of the black point on shape A and shape B?

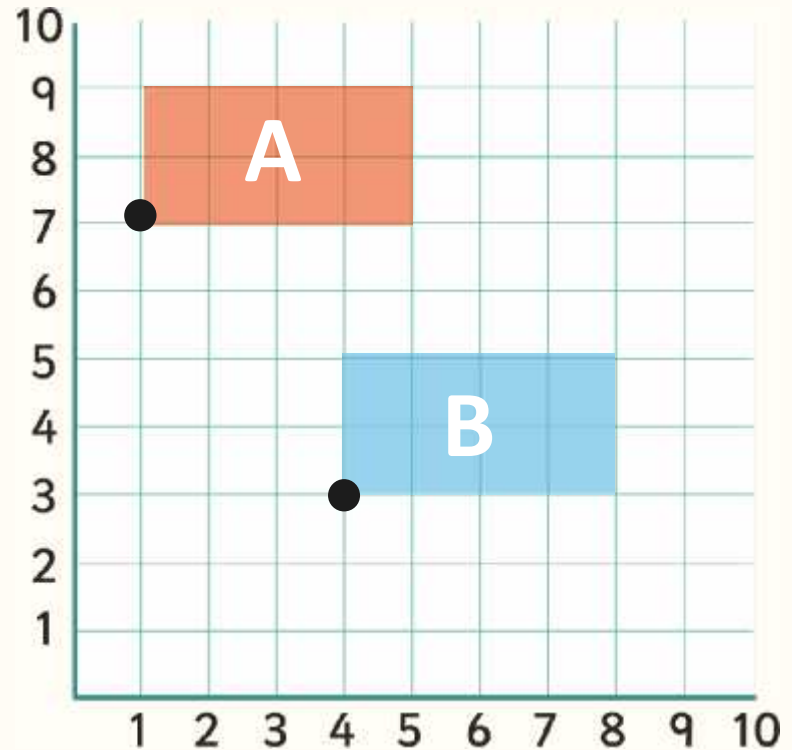
Reveal Answer

(1,7) moved to (4,3)

Can you work out all the coordinates of shape B?

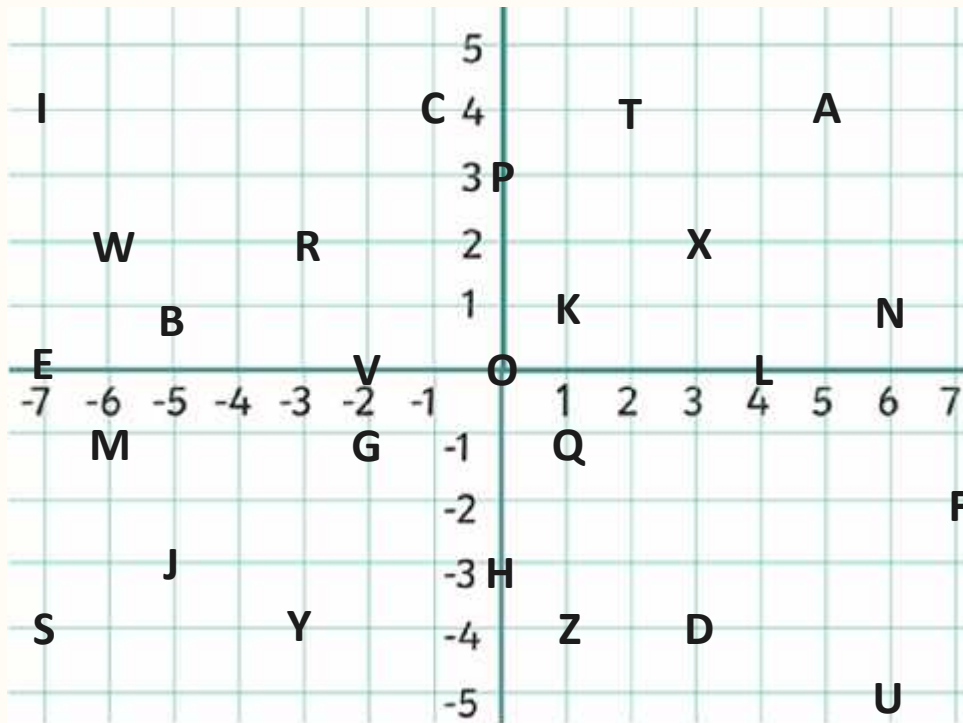
Reveal Answer

(4,3) (8,3) (8,5) (4,5)



Using All Four Quadrants

Work out the secret message below by using the coordinates on the grid.
Click for the coordinates.



- (0, 0) (6, 1) (-7, 0)
- (-7, 4) (-7, -4) (6, 1)
- (0, 0) (2, 4) (5, 4)
- (0, 3) (-3, 2) (-7, 4)
- (-6, -1) (-7, 0) (6, 1)
- (6, -5) (-6, -1) (-5, 1)
- (-7, 0) (-3, 2)

Reveal Answer

One is not a prime number.

