



MATHEMATICS



CHAPTER THREE



Session 31



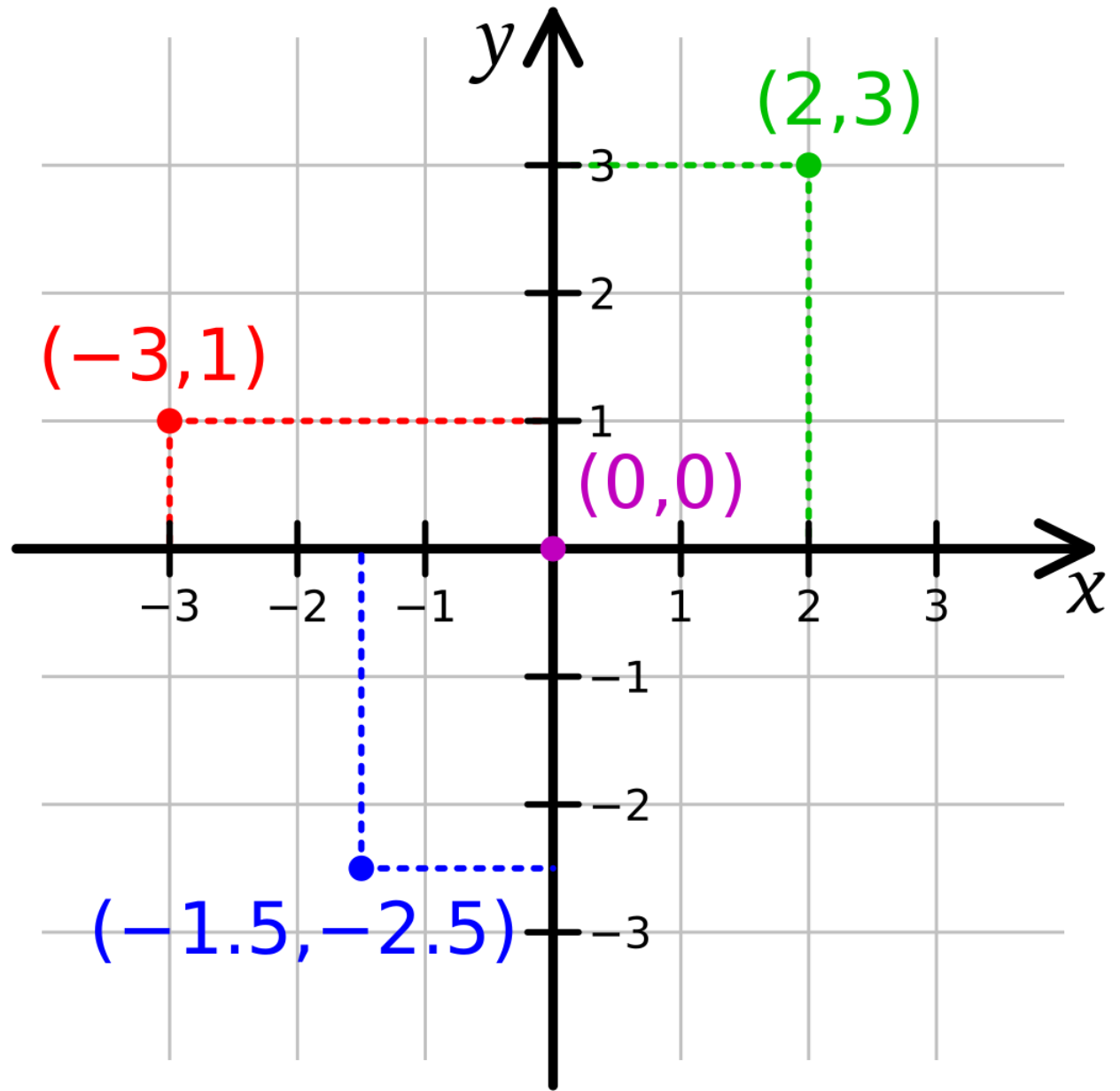
Use the ideas below
to talk about the man
in the photo.

French
Rene Descartes
mathematician
Coordinate Grid System



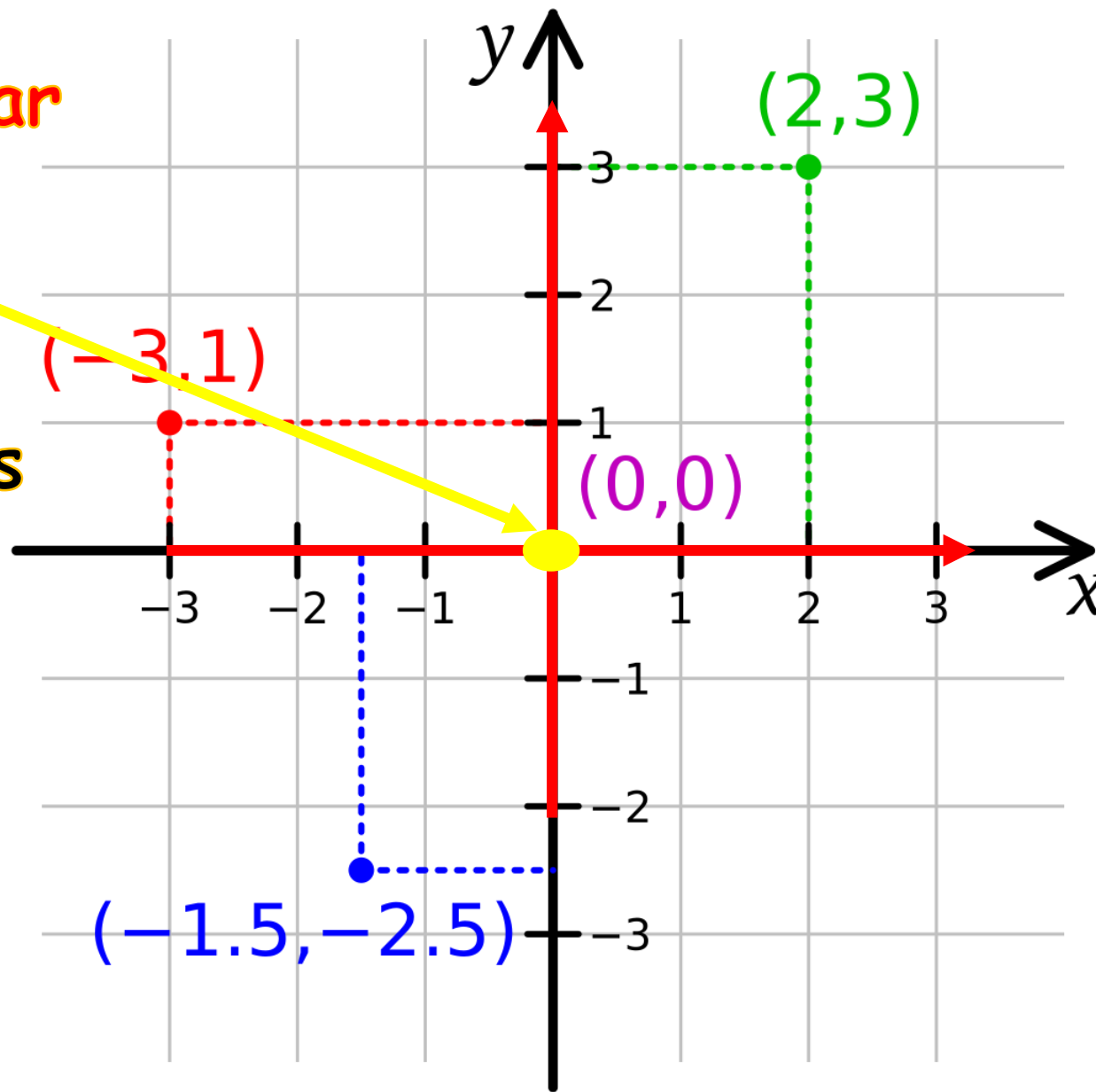
Rene Descartes was a French mathematician. He created "Coordinate Grid System".

"Coordinate Grid System"

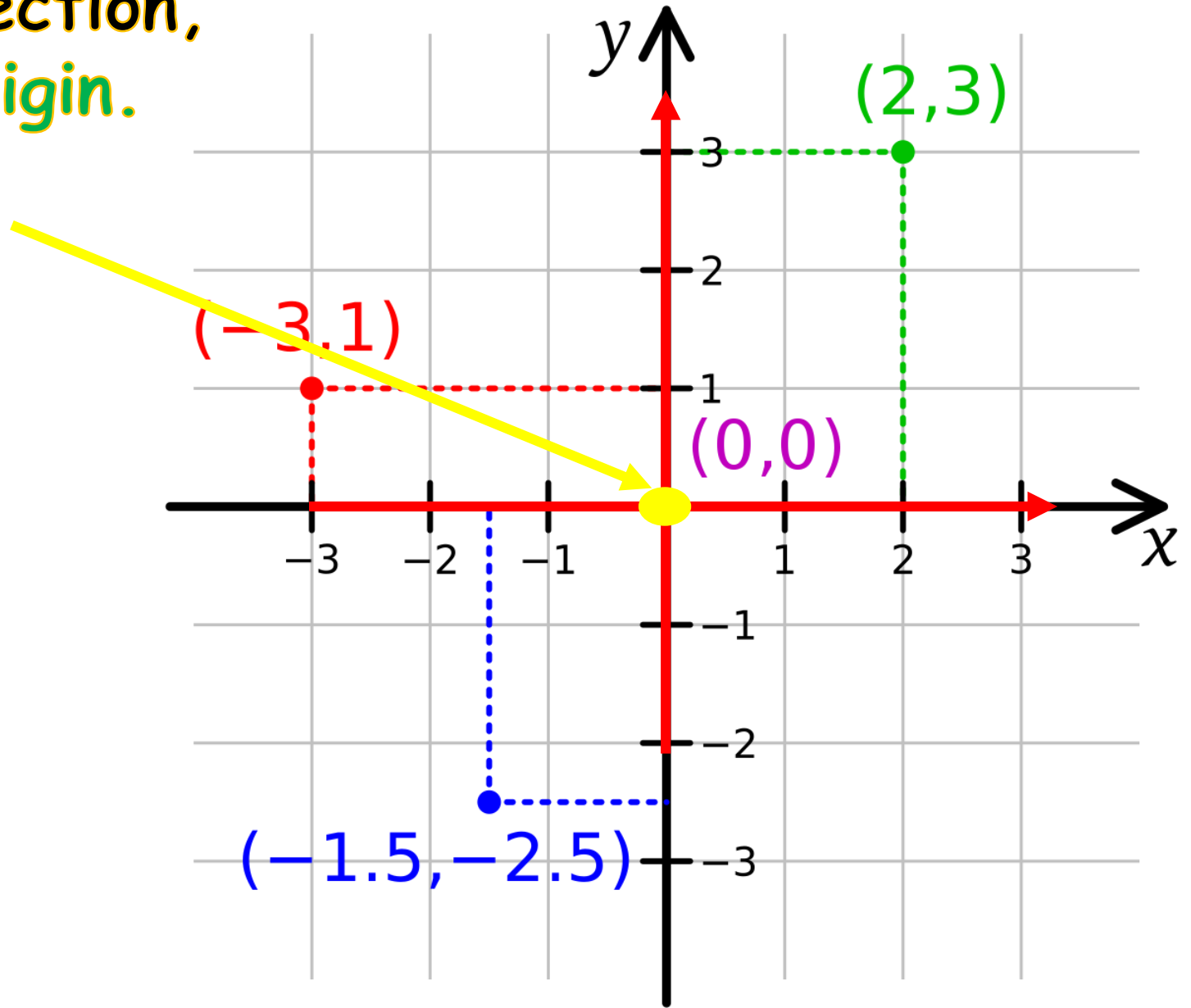


In a *Coordinate Grid System*, two **perpendicular** lines intersect at **0**.

They are horizontal axis
and
vertical axis.



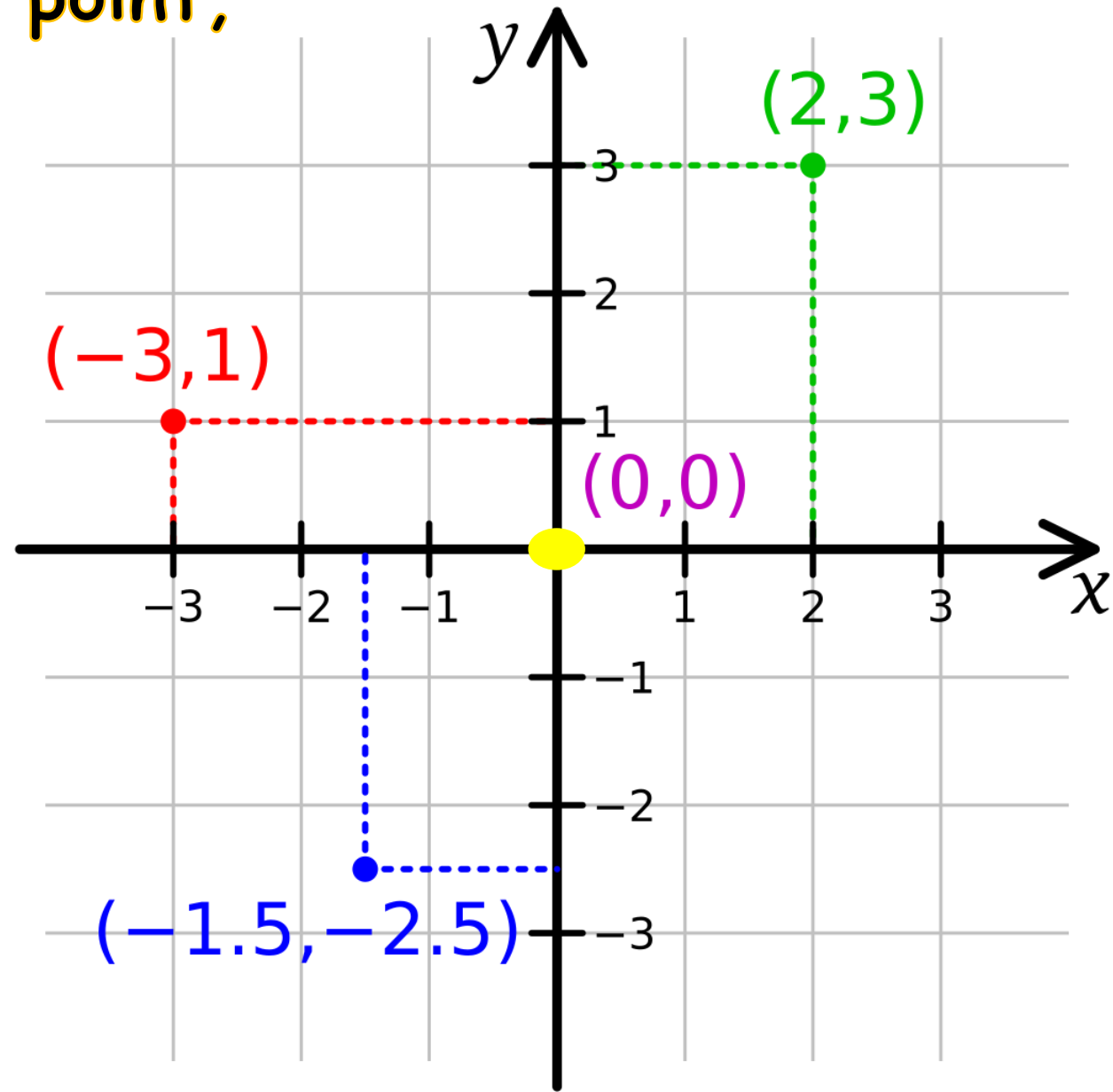
This point of intersection,
 0 , is called the origin.



To describe the position of a point,
we use 2 numbers:

The first number tells us
how far you move right(+)/
Left(- numbers).

The second number tells us
how far you move up/
Down(-numbers).



The set of two numbers
are called **coordinates**:
(2,3).

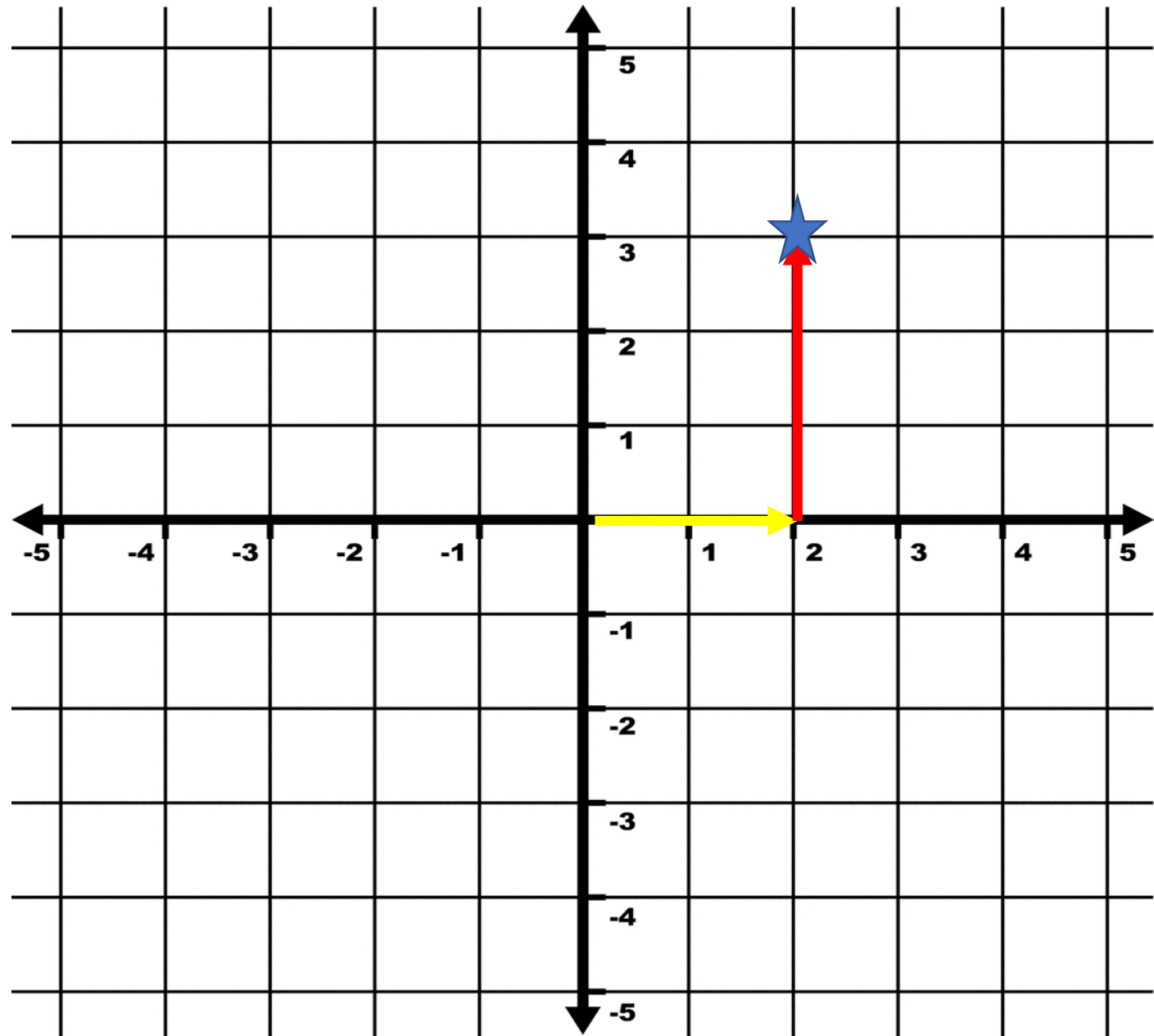
Now let's plot them.

We say:

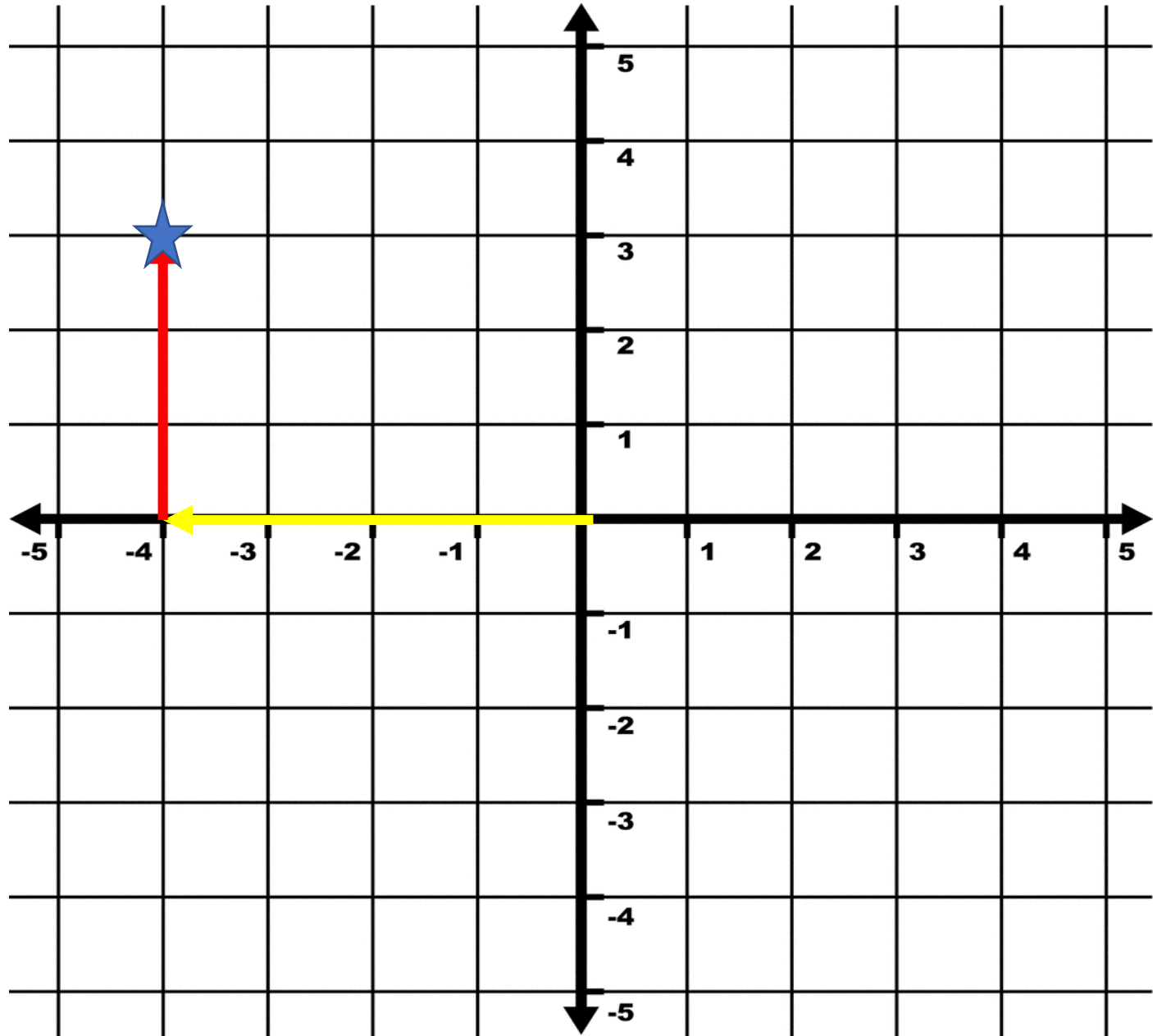
A has coordinates(2,3).

We write:

A(2,3).

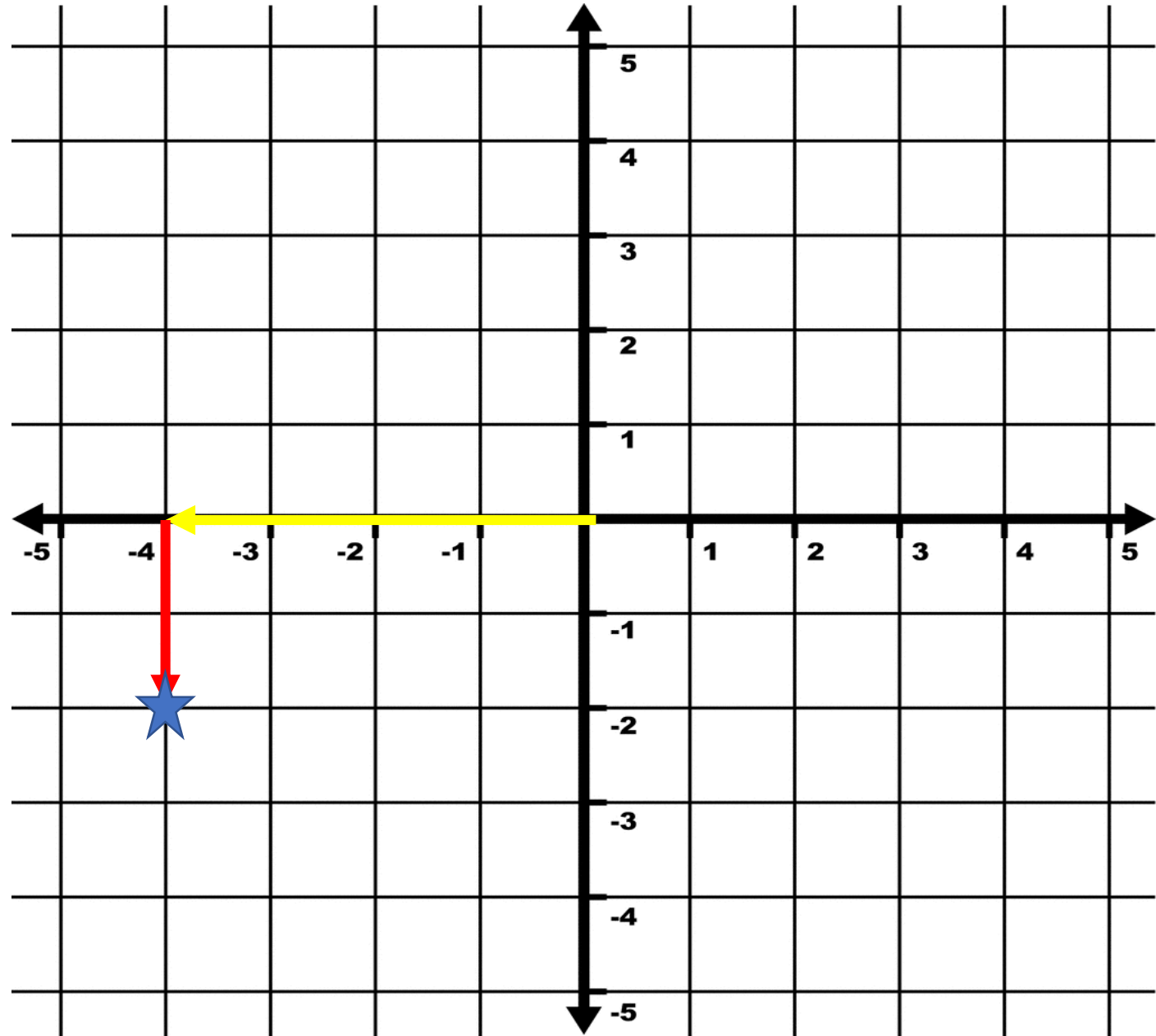


$(-4, 3)$.
Now let's plot them.

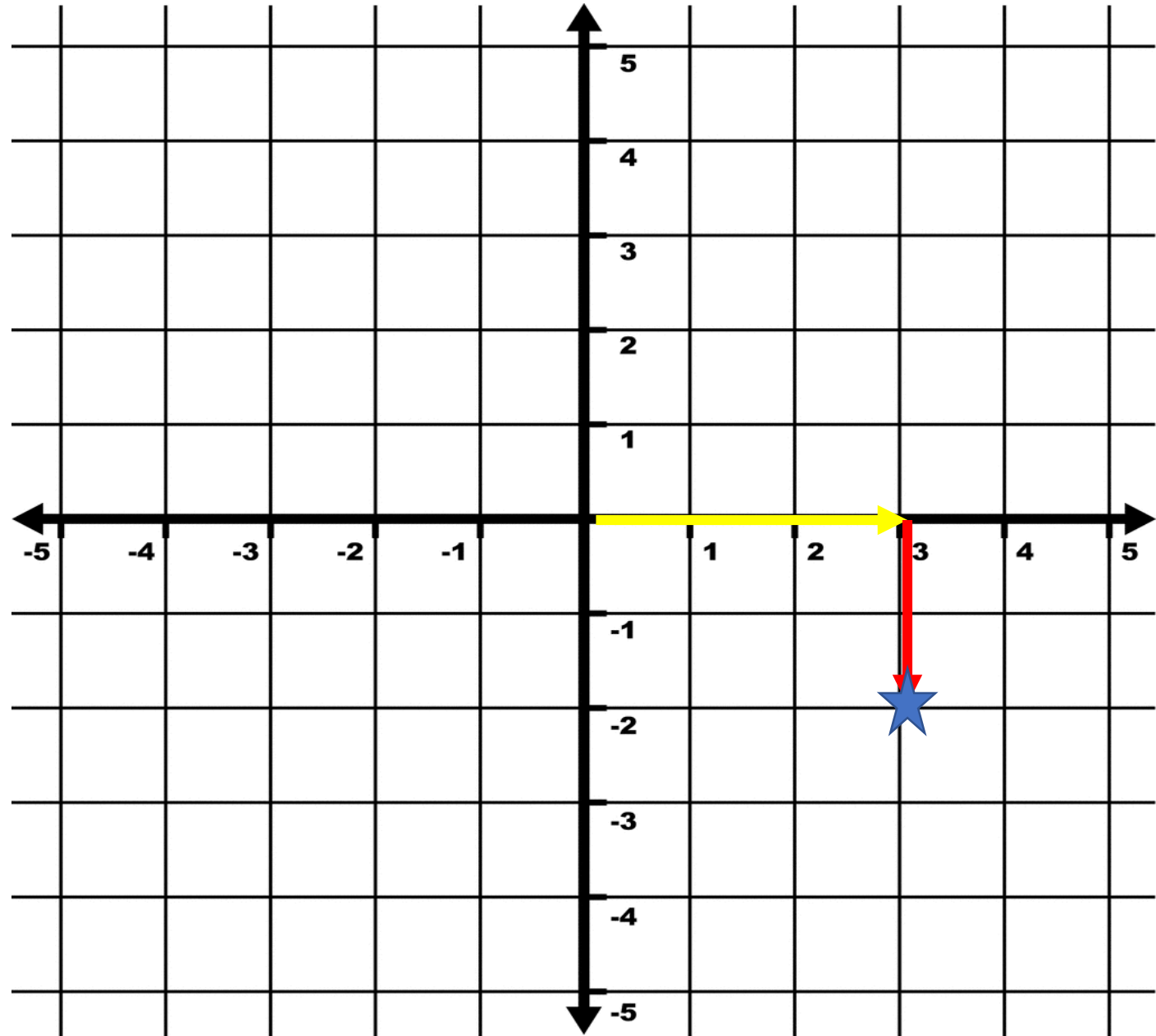


$(-4, -2)$.

Now let's plot them.

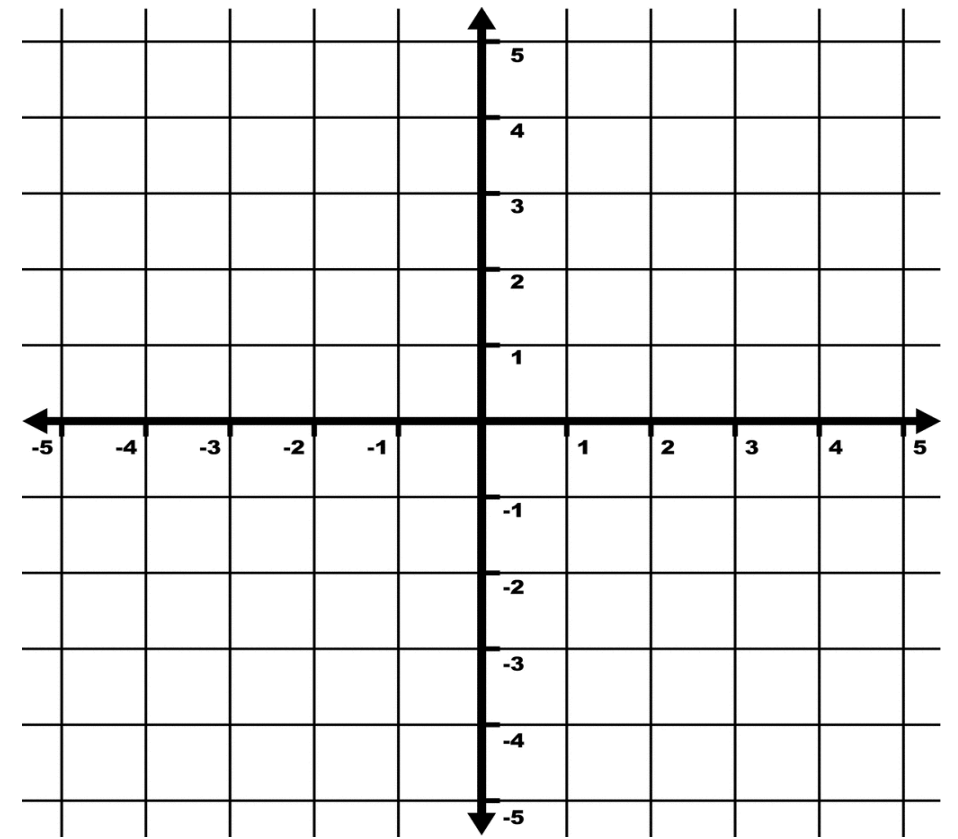


$(3, -2)$.
Now let's plot them.

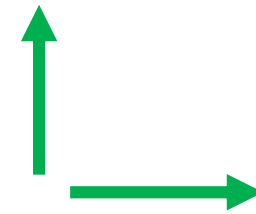


This picture shows C... G... S...
Or the Cartesian plane.

Each set of 2 numbers
are called c...



When the number is +, we move ...



When the number is -, we move ...

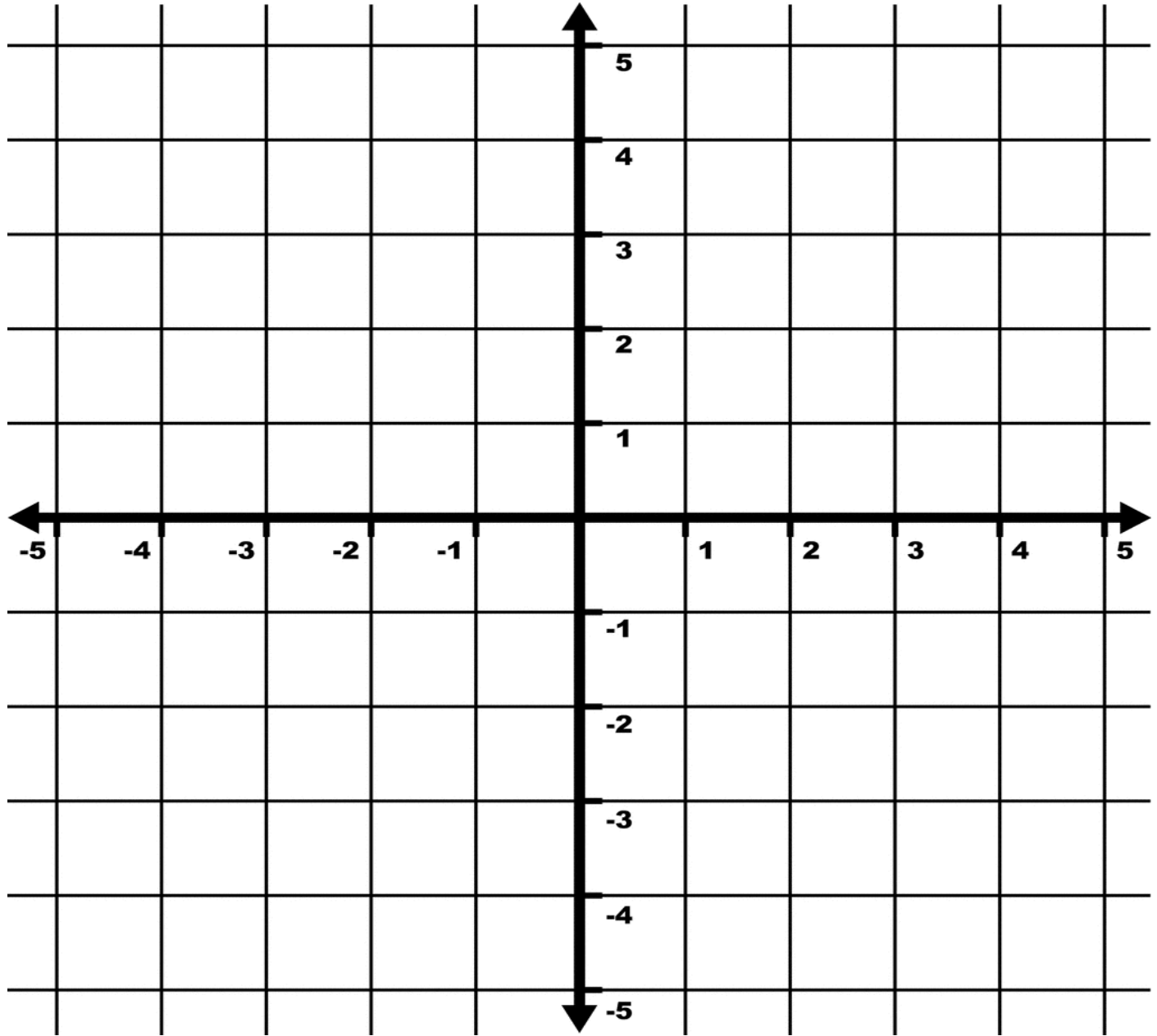


$A(-4, 3)$

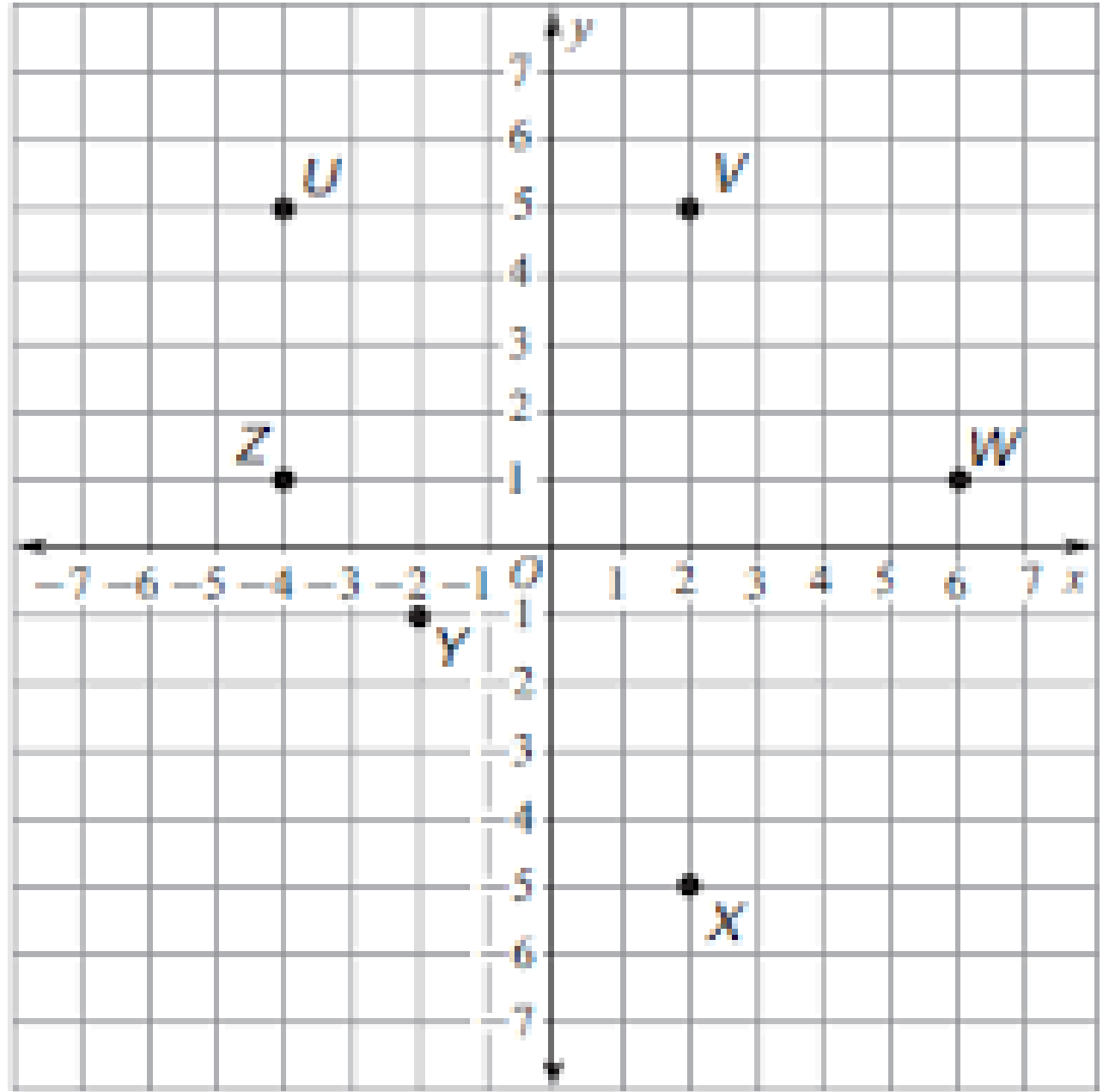
$B(-1, 1)$

$C(4, -5)$

$D(-2, -4)$



Write
the coordinates.



Alavi

21st Century Schools



MATHEMATICS





Session 32

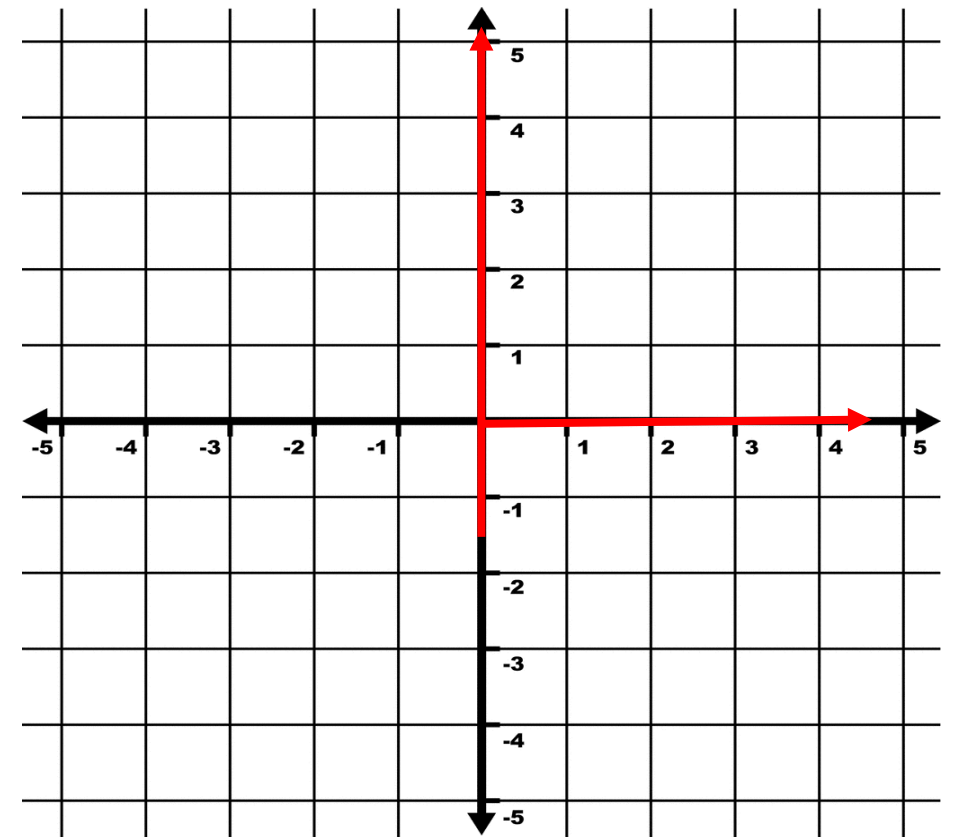
REVIEW

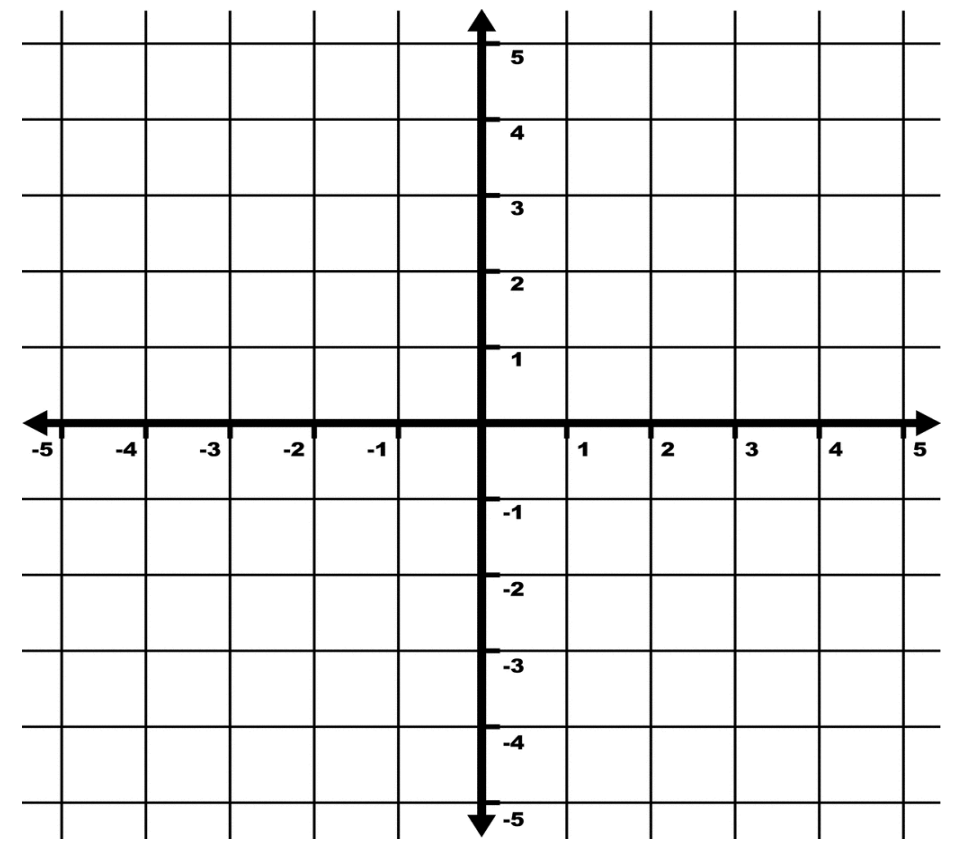
A 3D rendered image of the word "REVIEW" in a bold, green, sans-serif font. The letters are thick and have a slight shadow underneath. A magnifying glass with a silver frame and a black handle is positioned over the word, with its lens centered on the letter 'V'. The magnifying glass is tilted slightly to the right, and the lens is focused on the 'V', making it appear larger and more prominent than the other letters. The background is plain white.

This picture shows C... G... S...
Or the Cartesian plane.

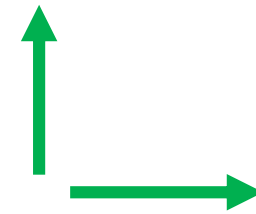
There are two lines:
h... axis or X-axis
v... axis or Y-axis.

Each set of 2 numbers
are called c... .





When the number is +, we move ...



When the number is -, we move ...



Lead-in: making a class grid(dividing the class into two lines of (Y and X axis)

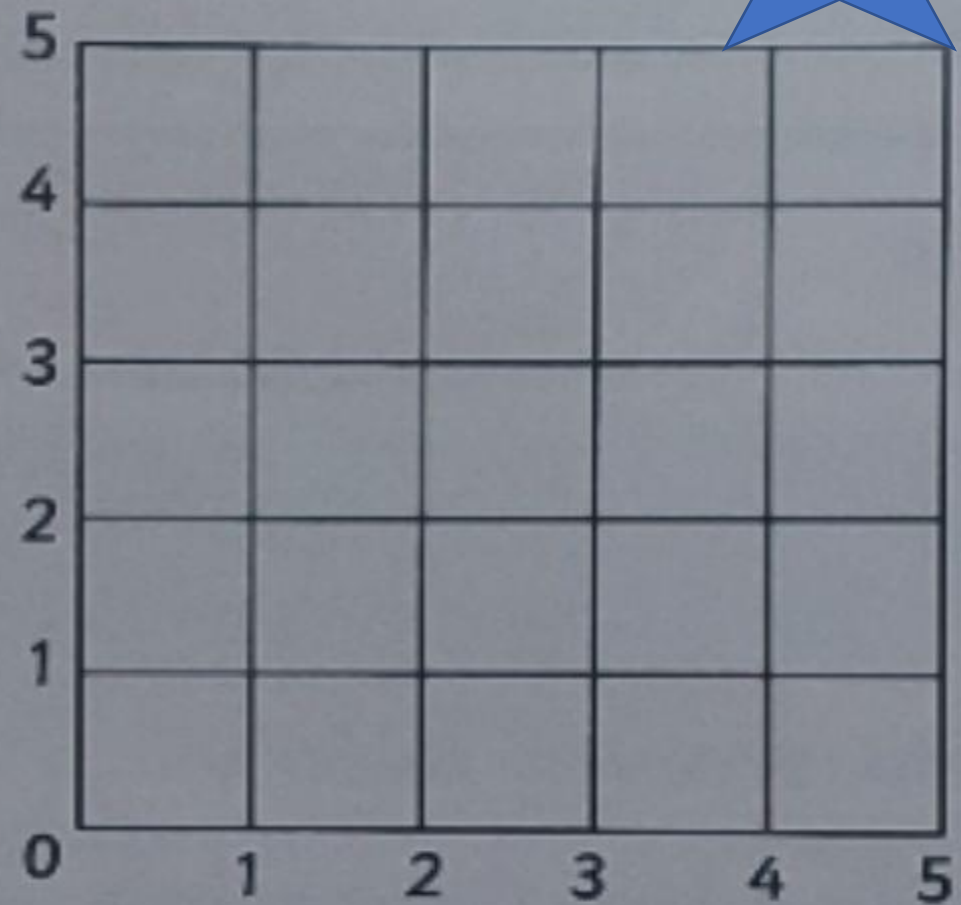
Sticking numbers on Ss's desks before class.

Writing a coordinates on the board..

Calling 2 students to read the coordinates and they have to locate the right students.

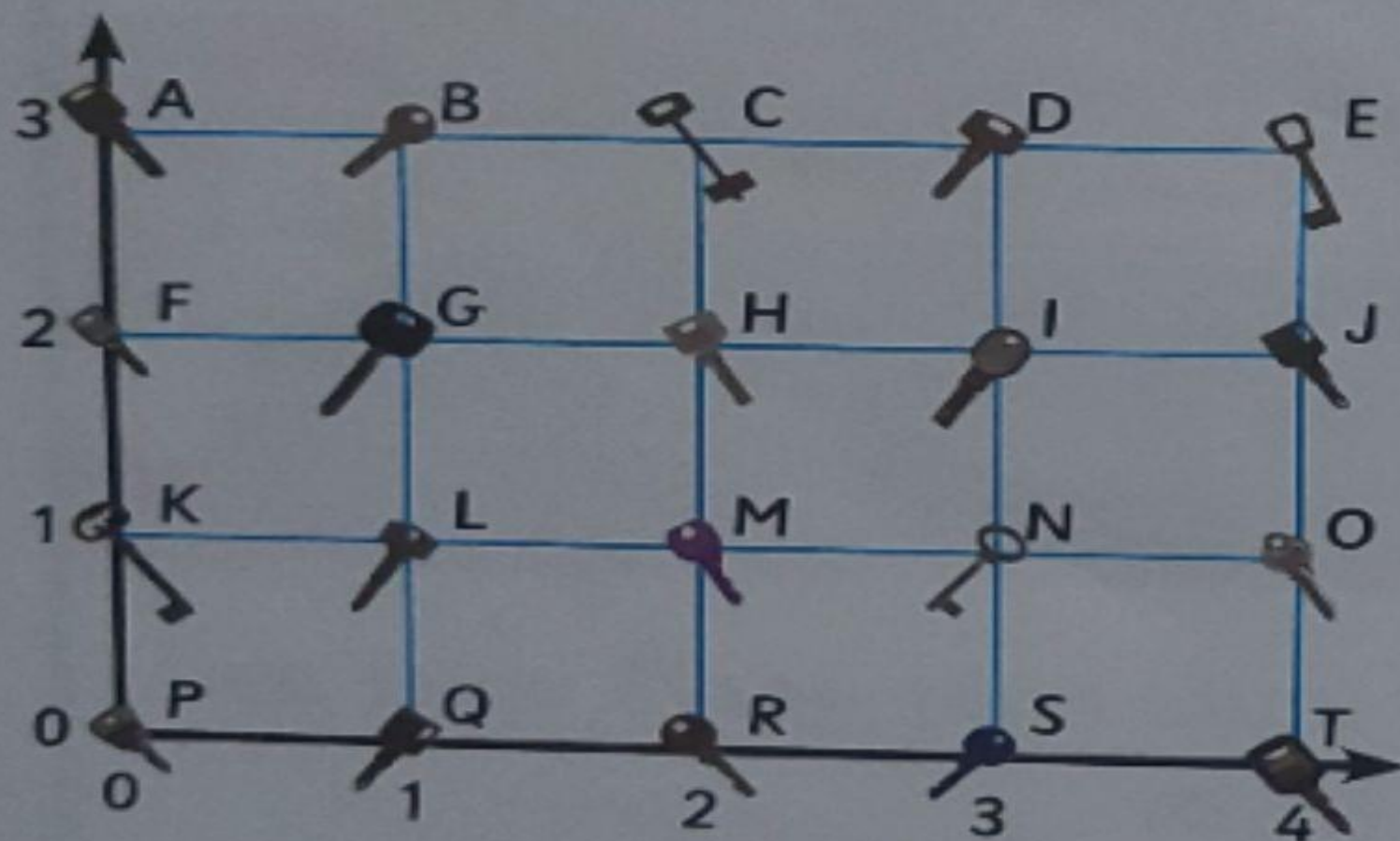
1. Draw a grid like this.
Plot $(1, 0)$ and $(5, 4)$ on
your grid.

Draw a line between the
two points.



What three other pairs of coordinates are on the
line?

2. You need four keys to open the treasure chest. The first three keys are at the coordinates $(4, 2)$, $(2, 0)$ and $(1, 1)$.



- a) What are the letters of the keys that open the first three locks?
- b) The four keys that open the chest are at the corners of a rectangle.
Which key opens the fourth lock?
- c) What are the coordinates of the fourth key?

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