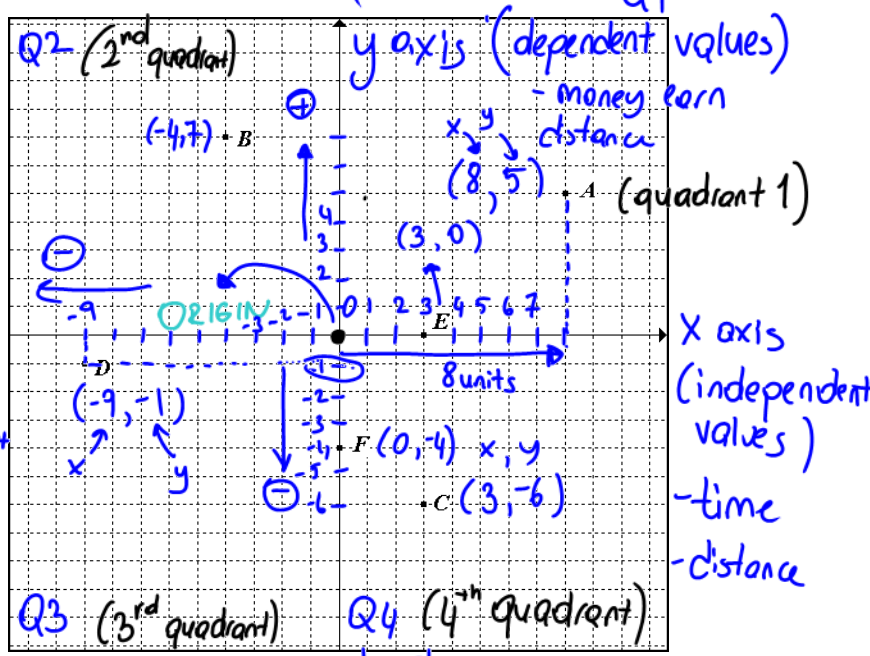


In 1637, the famous mathematician René Descartes devised a method identifying a point's position on a flat surface. He thought of using two intersecting numbered lines known as the **x** and **y axes** (pronounced "axees" – this is the plural of "axis") in order to plot points. The location of each point could then be identified by a pair of numbers known as the point's **coordinates**.

This **Cartesian plane**, and its invention changed mathematics forever. In **analytic geometry** we can represent points, lines, circles and other curves using Descartes' system.



negative infinity
-∞
Scale = 1
1 square = 1 unit



- There are two axes, the X-axis the y-axis. Place the name of the axis at its **positive end**. Pair (x, y)
- Label each axis with a scale numbered at each fourth square.
- The Cartesian plane is divided into 4 regions called QUADRANTS. Number them in a counter-clockwise direction starting at the top right with **Q1, Q2,...** etc. *parenthesis*
- Points are written with the X co-ordinate first, and the y coordinate second **inside brackets**. This is called an **ordered pair**. Label ordered pairs onto the points A to F.
- The **origin** is the point where the axes intersect. The coordinates of the origin are (0,0).
- State where the points have:

a) x coordinate 0	F (0, -4)
b) y coordinate 0	E (3, 0)
c) x coordinate negative	B(-4,7) D(-8,-1)
d) y coordinate negative	C(3,-6) F(0,-4) D(-9,-1)
e) x coordinate negative and y coordinate positive	B(-4,7)
f) x coordinate -4	B(-4,7)
g) y coordinate 3	N/A