PRINCIPLES - LESSON 6A
THE COORDINATE PLANE

René Descartes and The Fly

René Descartes
1596-1650

Influential French philosopher,
mathematician, and scientist

"I think, therefore I am."
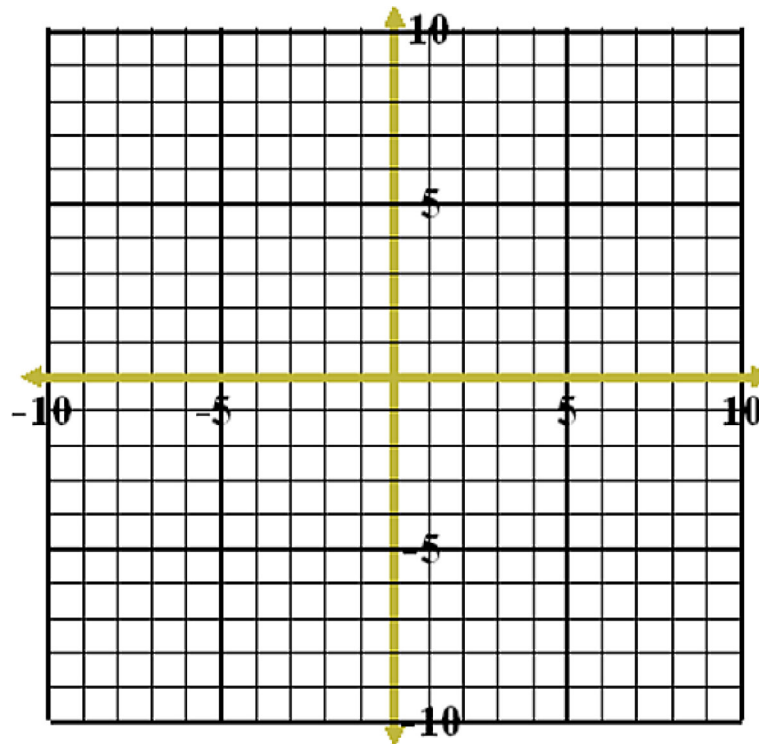
The Fly
Early March 1617- Mid March 1617

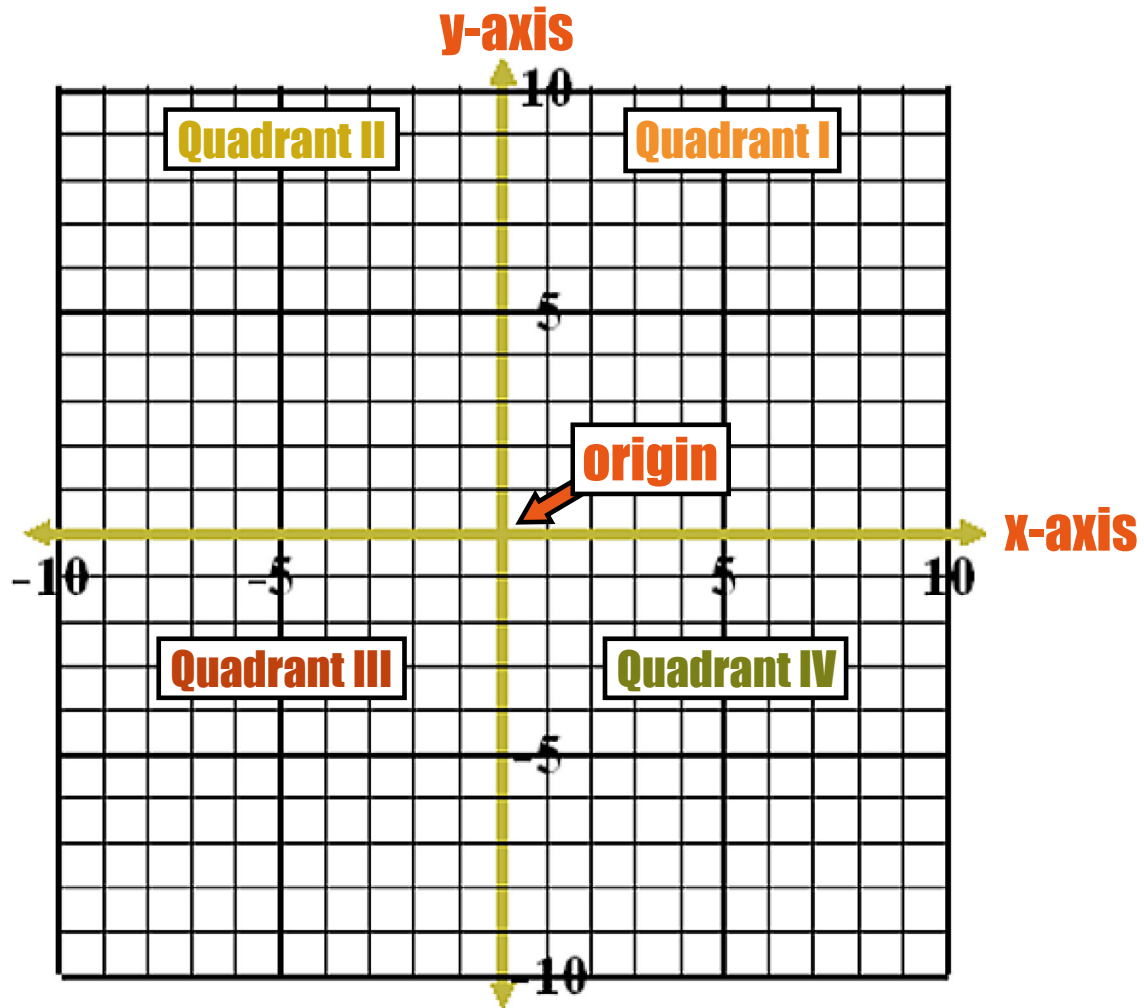Insect, disease-carrier, and
all-around annoying pest

"Bzzzzz."

THE COORDINATE PLANE

The Coordinate Plane is formed by the intersection of a horizontal number line and a vertical number line.

It is also sometimes called the Cartesian Plane, for its inventor, Descartes.

PARTS OF THE COORDINATE PLANE

ORDERED PAIRS

Each point in the Coordinate Plane corresponds to an ordered pair.

$$(3, -2)$$

x-coordinate   y-coordinate

The x-coordinate tells which way to go on the x-axis. (left or right)
The y-coordinate tells which way to go on the y-axis. (up or down)

It is called an ordered pair because there are two coordinates (a pair) and they are in a certain order.

The coordinates are in ALPHABETICAL order.

PLOTTING ORDERED PAIRS ON THE COORDINATE PLANE

The point in the plane that corresponds to an ordered pair is called the **graph** of the ordered pair.

Graph each ordered pair.

State the quadrant in which each pair lies.

ex1) $A\,(3, -2)$ **quadrant IV**

ex2) $D\,(-2, 3)$ **quadrant II**

ex3) $G\,(0, 9)$ **on y-axis**

ex4) $M\,(-6, -8)$ **quadrant III**

ex5) $N\,(-7, 0)$ **on x-axis**