

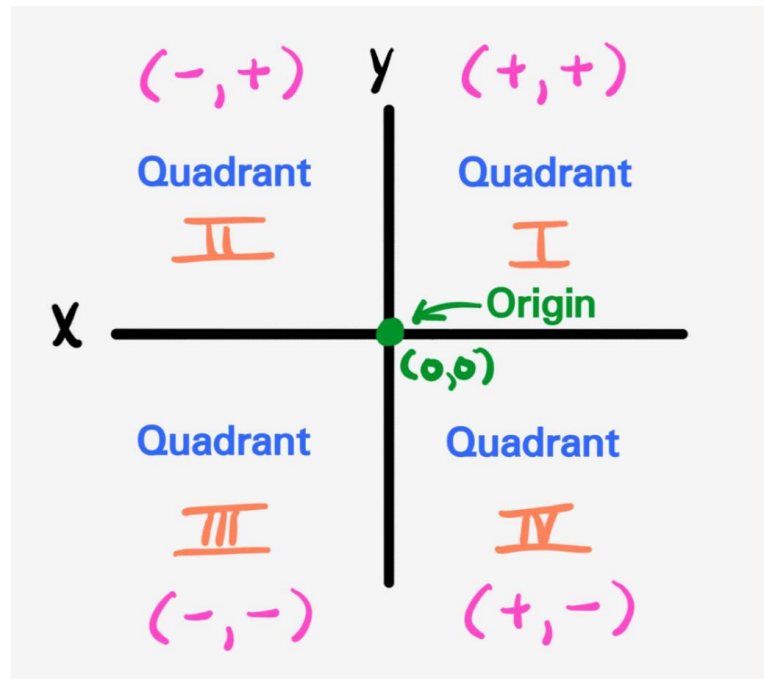


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IM2 – F.IF.4: Key Characteristics of Graphs: Graphs Review (Notes 01) – Graph Review

- **Coordinate Plane** – A two-dimensional number line where the vertical line is called the y-axis and the horizontal is called the x-axis.
 - These lines are perpendicular and intersect at their zero points (the origin).
 - The axes divide the plane into four quadrants.
- **Quadrants** - The axes of a coordinate plane are divided into four infinite regions.
 - They are numbered from 1st to 4th and denoted by Roman numerals: I, II, III, & IV
 - The signs of the (x,y) coordinates are:

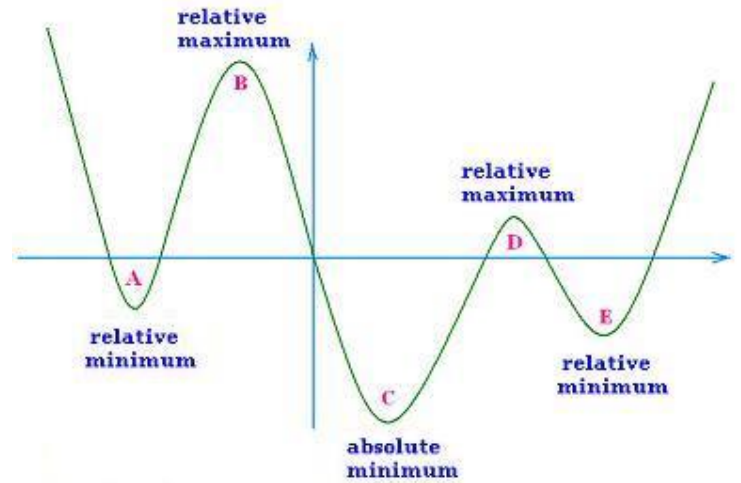
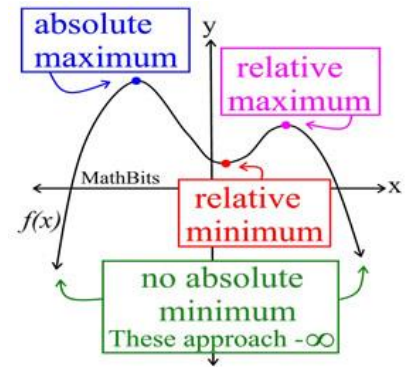


Quadrant I: (+,+) <i>Top Right</i>	Quadrant II: (-,+) <i>Top Left</i>	Quadrant III: (-,-) <i>Bottom Left</i>	Quadrant IV: (+,-) <i>Bottom Right</i>
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- **Graph** - A diagram showing the relation between variable quantities.
 - A graph is drawn onto a coordinate plane with an x- and y- axis.
 - The axes are NOT part of the graph itself. They are part of the coordinate plane that a graph is drawn onto.
 - x-axis: input values / independent quantities (horizontal axis: Left to Right)
 - y-axis: output values / dependent quantities (vertical axis: Bottom to Top)
- **Coordinate** – Location marked on a graph using a point (x, y).
 - To locate x & y, start at the origin (0, 0) and move along the x-axis horizontally, then identify the y-value vertically.
 - x comes 1st alphabetically. It is graphed first, using the numbers on the x-axis.
 - y comes 2nd alphabetically. It is graphed second, using the numbers on the y-axis.

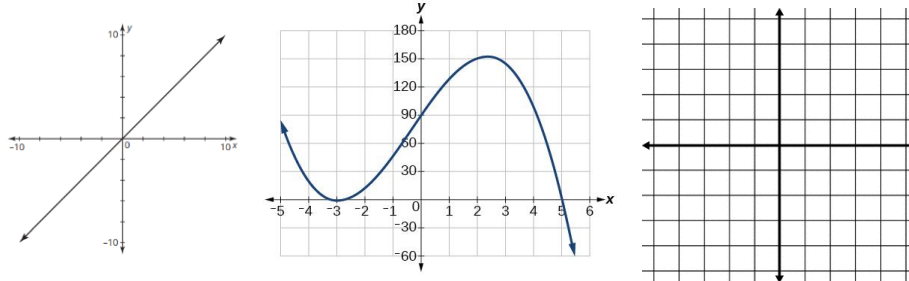
- Extrema (Maxima & Minima)

- Absolute Maximum - A point with a y coordinate greater than the y-coordinates of every other point on the graph.
- Absolute Minimum - A point with a y-coordinate less than the y-coordinates of every other point on the graph.
- Relative Maximum - The highest point in a particular section of a graph.
- Relative Minimum - The lowest point in a particular section of a graph.



- Numerical Data

- Continuous – Measured data.
 - A graph of points that are connected by a line or smooth curve. They have no breaks.



- Discrete – Counted data.
 - A graph of isolated points.

