Name: _____ Date: _____

Characteristics of Linear Graphs

Interval Notation:

Represents an interval as a _____. The numbers are the endpoints of the

interval. _____ and/or _____ are used to show excluded or included.
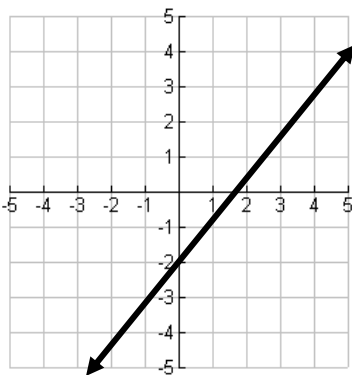
Interval :

Domain and Range:

Domain: The _____ that are contained in the graph. Write it from _____.

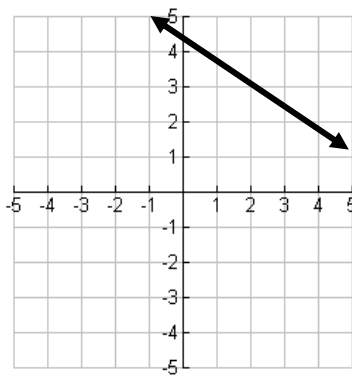**Range:** The _____ that are contained in the graph. Write it from _____.

Examples:

  1) D: _____   2) D: _____   3) D: _____
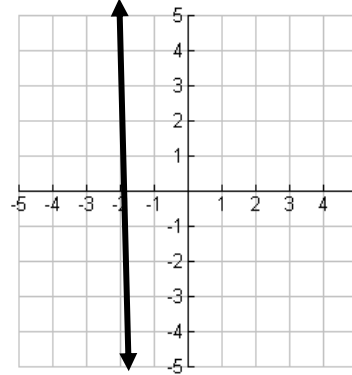
       R: _____   R: _____   R: _____

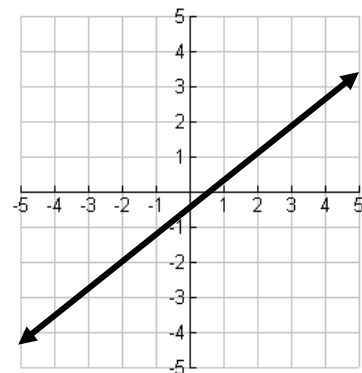## Interval of Increasing and Decreasing:

Always read from _____ to _____

- If your finger is going up, the graph is _____.

- If going down, the graph is _____.

Example:

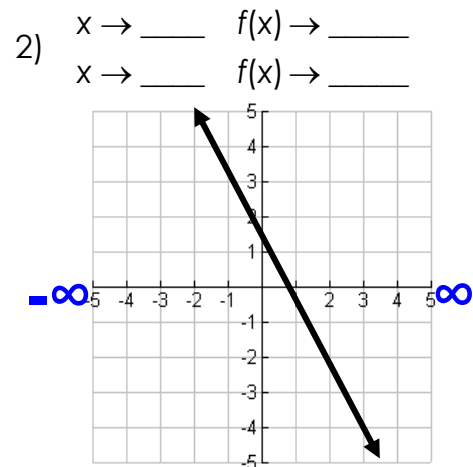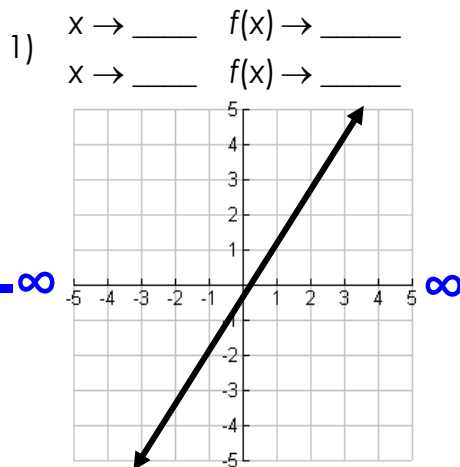   Inc: _____

        Dec: _____

Zeros/Roots/Solutions

Intercepts

- **x-intercept –** the point at which the line intersects the _____. (   )

- **y-intercept –** the point at which the line intersects the _____. (   )

End Behavior:

- What a function keeps doing after it leaves the graph

- _____ : As x goes to the right, where does y go?

- _____ : As x goes to the left, where does y go?

1) $x \rightarrow$ ____ $f(x) \rightarrow$ ____
      $x \rightarrow$ ____ $f(x) \rightarrow$ ____

2) $x \rightarrow$ ____ $f(x) \rightarrow$ ____
      $x \rightarrow$ ____ $f(x) \rightarrow$ ____

Rate of Change:

- The rate of change is the average _____ of a graph over a given period

- The period is defined by _____

- The rate of change formula is: