# Linear Function – Review

**Slope of a line:** Let $P_1(x_1, y_1)$ and $P_2(x_2, y_2)$ be distinct points on a non-vertical line, L. The slope of L is

**SLOPE-INERCEPT FORM**

**POINT-SLOPE FORM**

**GENERAL FORM**

where A and B are not both zero, A, B and C are preferably integers

**STANDARD FORM**

where A and B are not both zero, A, B and C are preferably integers and A0

- **Parallel lines** have identical slope.




- **Perpendicular lines** have slopes that are negative reciprocals of one another.




# Domain (D) and Range (R)

○ **A function from a set D to a set R is a rule that assigns a unique element in R to each element in D.**

○ Domain and range can be described as intervals. The endpoints of an interval are the **boundary** and are called the **boundary points.** The remaining points are the interval's **interior** and are called the **interior points.**

○ **A Closed Interval:** an interval that contains the boundary points.




○ **An Open Interval:** an interval that does not contain any boundary points. That is every point in the interval is an interior point.




○ Some intervals are closed on one side and open on the other side. These intervals are neither open nor closed.