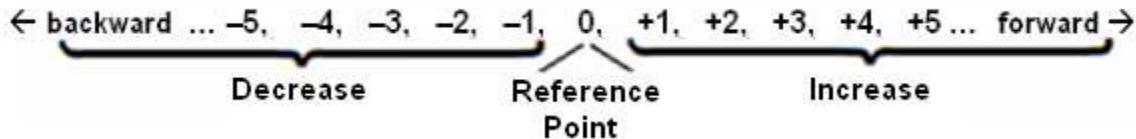


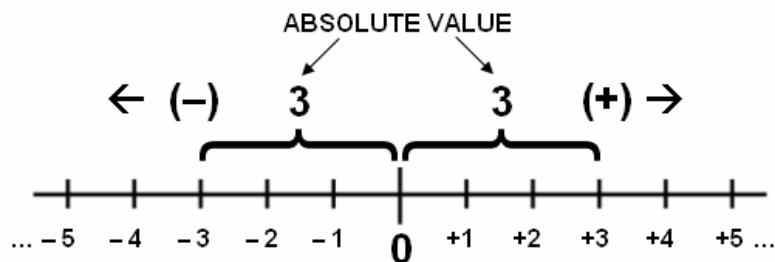
## SIGN AND ABSOLUTE VALUE

**FACT 1:** The sign indicates increase or decrease from the reference point of zero.



**FACT 2:** The sign indicates increase or decrease. Absolute value indicates the amount of increase or decrease.

On a number line, the absolute value represents the “distance” from “0” regardless of direction.



**FACT 3:** The absolute value is indicated by two bars on either side of an integer.

$$\begin{array}{rcl} |+3| & = & 3 \\ |-3| & = & 3 \end{array}$$

**FACT 4:** The absolute value is expressed “without sign” and treated as positive in calculations. The negative of absolute value would be a negative number.

$$\begin{array}{rcl} |5 - 3| & = & 2 \\ |3 - 5| & = & 2 \\ -|3 - 5| & = & -2 \end{array}$$

**FACT 5:** Two integers of equal absolute value but opposite signs cancel each other out.

$$\begin{array}{rcl} +3 \text{ and } -3 & = & 0 \\ +6 \text{ and } -6 & = & 0 \\ +9 \text{ and } -9 & = & 0 \end{array}$$

1. Identify the integers, their signs and the absolute values below.

$$+15, -15, |+15|, 3, -7, |-8|, +9, 12, |-12|, -19,$$

**End of Lesson**