M9

Integers

- Plot 0 on the horizontal number line.
- Plot 5 smallest positive integers on the horizontal number line.
- Plot 5 largest negative integers on the horizontal number line.

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Integers are counting numbers (= positive whole numbers), zero, and the opposites of the counting numbers.

o The proper mathematical name for counting numbers is _____ numbers.

o To order integers from least to greatest is to write them in **ascending = increasing order.**

9	−5	0	−7	2	11

o To order integers from greatest to least is to write them in **descending = decreasing order.**

4	5	−3	−8	−1	0

Recall: The more to the left a number is on the number line, the smaller it is.
The more to the right a number is on the number line, the greater it is.

Recall:

- **Adding a negative number is the same as subtracting a positive number.**

$$6 + (-4) = 6 - 4$$

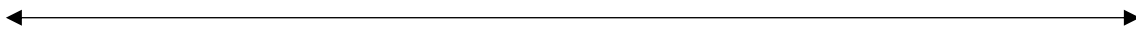- **Subtracting a negative number is the same as adding a positive number.**

$$13 - (-5) = 13 + 5$$

Examples:

Using a number line to add and subtract integers.

    o To add, move to the right.

$-5 + 3 =$

$$\longleftarrow\rule{10cm}{0.4pt}\longrightarrow$$

    o To subtract, move to the left.

$-7 - 4 =$

$$\longleftarrow\rule{10cm}{0.4pt}\longrightarrow$$

Task: Give at least 5 real-life examples when we use negative numbers.

Multiplication Rules:

Examples: