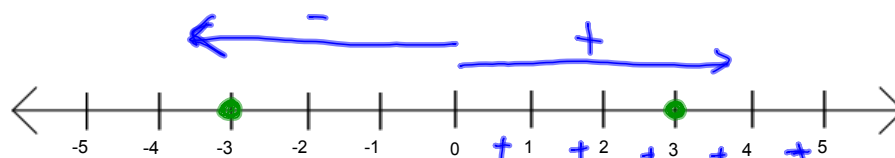


- I can find the absolute value of a number.
- I can use a number line to add integers.

Integers

all the whole numbers and their opposites

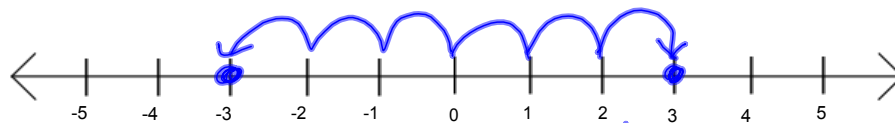


All integers except zero are **signed numbers**, either positive or negative.

Signed numbers are sometime called **directed numbers** because the sign of the number can be thought of as a direction indicator.

The **absolute value** of a number is its distance from zero.

(always positive)

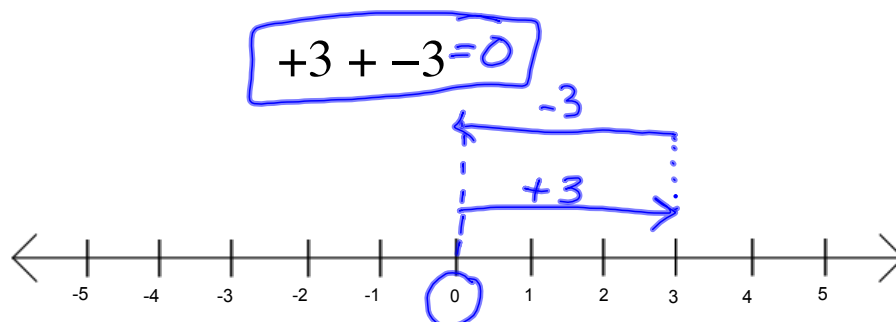


$$|-3| = 3 \quad |3| = 3$$

$$\begin{array}{r} |2| + |3| \\ 2 + 3 \\ 5 \end{array} \quad \begin{array}{r} |-4| + |-2| \\ 4 + 2 \\ 6 \end{array} \quad \begin{array}{r} |6-3| \\ |3| \\ 3 \end{array} \quad \begin{array}{r} |2-2| \\ |0| \\ 0 \end{array}$$

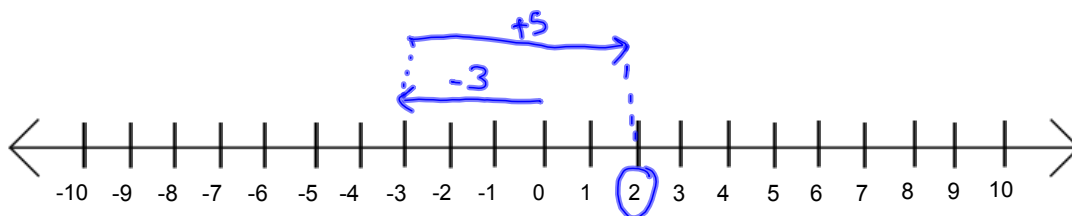
$$||3| \neq 3$$

Adding Integers on a Number Line

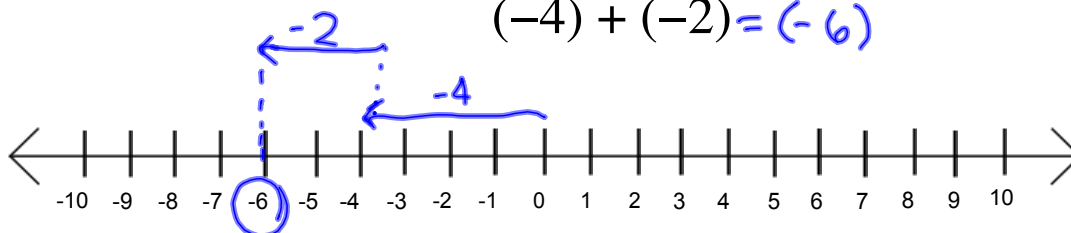


*The sum of two opposites is always zero.

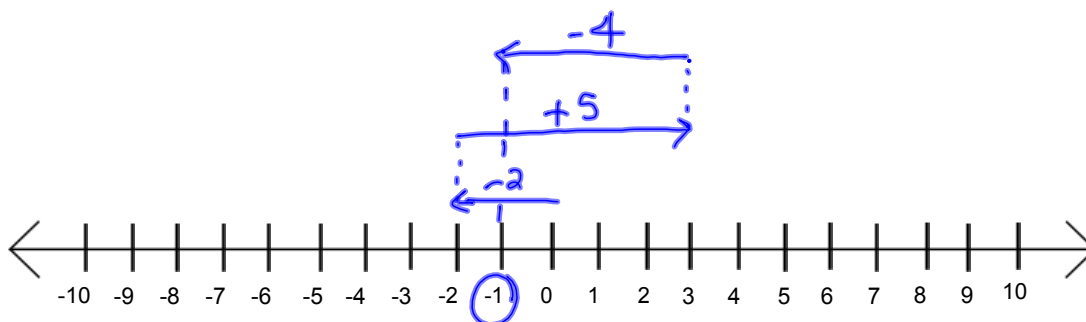
$$(-3) + (+5) = 2$$



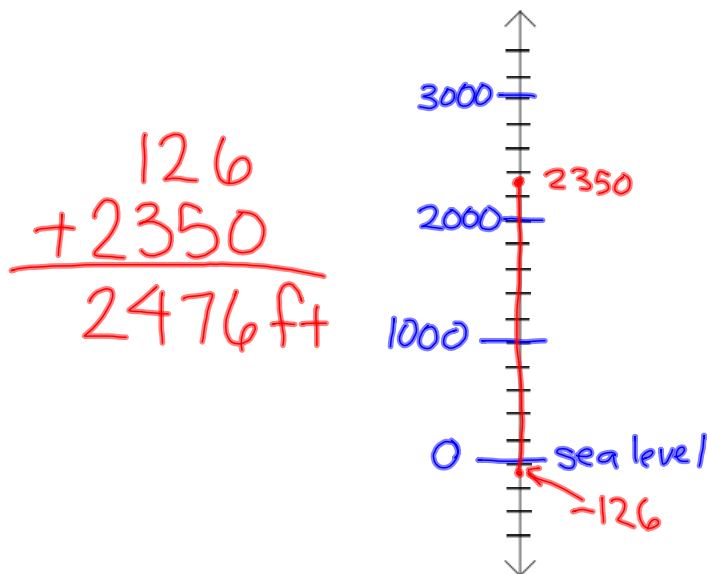
$$(-4) + (-2) = (-6)$$



$$(-2) + (+5) + (-4) = (-1)$$



The troop began the hike on the desert floor, 126 feet below sea level. The troop camped for the night on a ridge 2350 feet above sea level. What was the elevation gain from the start of the hike to the campsite?



Krissie did not have any money. In order to buy a friend's birthday present, Krissie borrowed \$5 from her sister. Later Krissie received a check for \$25 from her grandmother. After she repays her sister, how much money will Krissie have?

