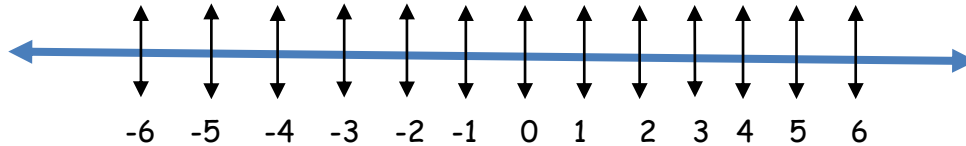




### Renumeration of Number Line

Number Line helps us to determine which number is greater or lesser value.



Positive numbers beyond or right to zero is in increases in value while the negative numbers left to zero decreases in value.

Example: a. 1 is greater than -1  
c. 3 is greater than -6

b. -6 is lesser than 0  
d. 0 is greater than -1

You try:

a. 2 \_\_\_\_\_ 3

b. 0 \_\_\_\_\_ -5

b. is greater than

d. Is lesser than

Numbers with sign (+ or -) is called as integers.

Example:

Addition

- a.  $5 + 0 =$  (Simply add the numbers because it has the same sign) Ans.5
- b.  $5 + (-3) =$  (Since it has two different sign, you will subtract and will follow the sign of the number with larger value) Ans.2
- c.  $-3 + -6 =$  (Simply add the numbers if it has the same sign and use the sign of the number) Ans. -9
- d.  $-9 + 2 =$  (Since it has two different sign, you will subtract the two and copy the sign of the number with larger value) Ans.-7

Subtraction

- a.  $5 - 0 =$  (Simply subtract the numbers) Ans.5
- b.  $5 - (-3) =$  (Since it has two different sign, you will add the numbers because - times - is +) Ans.8
- c.  $-3 - -6 =$  (That makes it  $-3 + 6$  because - times - is +) Ans. +3
- d.  $-9 - 2 =$  (Since it has two different sign, you will subtract the two and copy the sign of the number with larger value) Ans.-11



If you are multiplying/dividing integers with the same sign, the resulting sign should be positive but if you are multiplying/dividing integers with different sign, the resulting sign should be negative.

✚ Multiplication

A.  $5 \times 0 = 0$

B.  $5 \times (-3) = -15$

C.  $-3 \times -6 = 18$

D.  $-9 \times 2 = -18$

✚ Division

A.  $5 \div 1 = 5$

B.  $9 \div (-3) = -3$

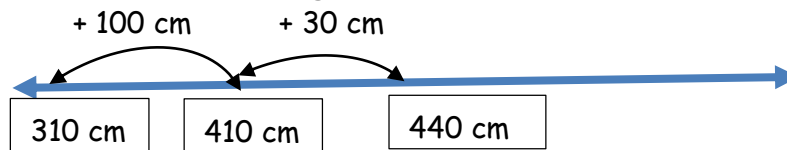
C.  $-6 \div -3 = 2$

D.  $-10 \div 2 = -5$

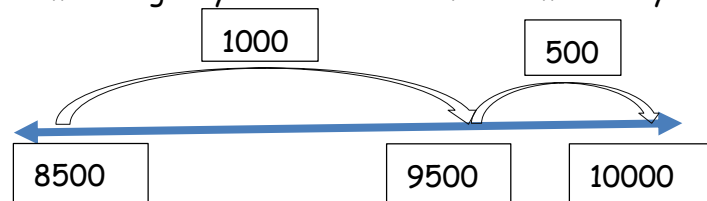
Let us now solve problems using the number line. Think of it as an empty number line except the numbers presented to you.

Example:

1. A tree is 310 cm tall and grows another 130 cm. How tall is the tree? Ans. 440 cm



2. You want to give 10,000 candies to your twin friends who will celebrate their 10<sup>th</sup> birthday. Your mother give you 8500 candies. How much do you need to buy? Ans. 1500



3. A rope used in a building is 13,100 cm. If the 100 cm is cut-off, how much rope is left? Ans. 13, 000

