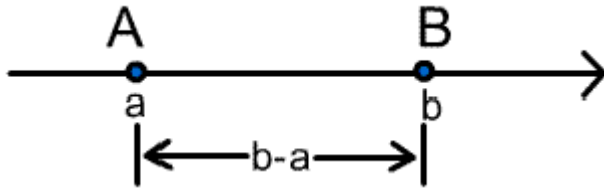
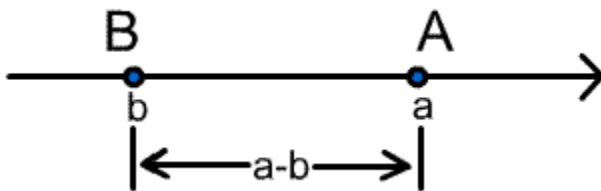


Dear Student,

In the figure below the distance between A and B is  $(b-a)$  for  $b > a$



Now if  $a > b$ , then the distance between A and B will be  $(a-b)$



From the above two results we can write as  $a-b = -(b-a) = |b-a|$ . Because the distance between any two points always positive.