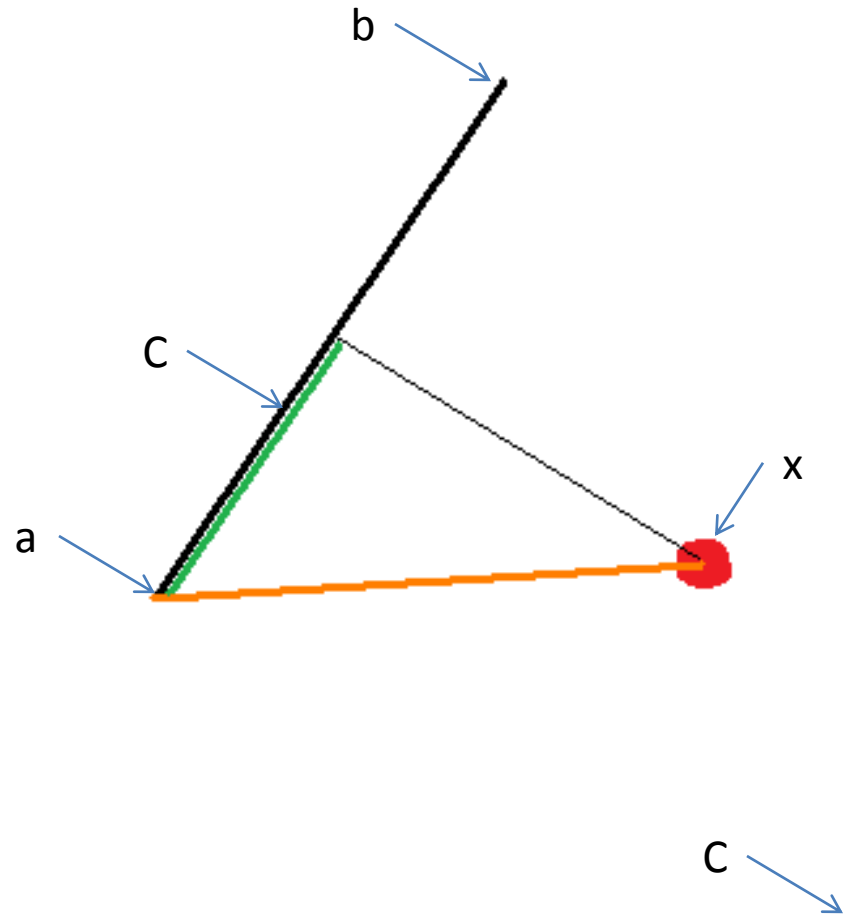


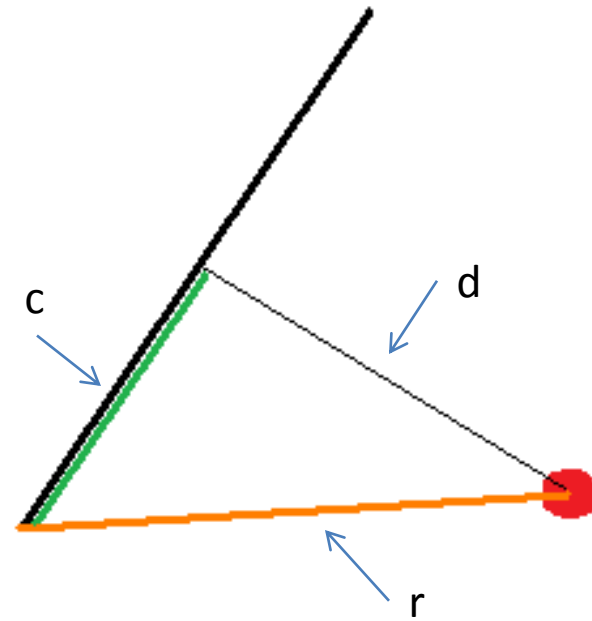
First Step

- C is the length of the projection of ax on ab
- $C = (b-a) \cdot (x-a)$
 - The dot product of the two vectors w.r.t. a
- Positive \rightarrow in direction of ab
- Negative \rightarrow behind a on ab



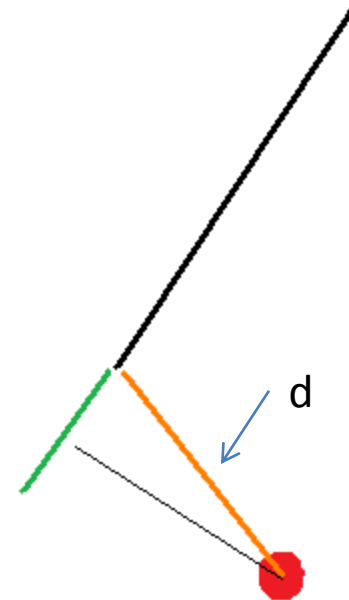
In Segment

- $d = \text{Sqrt}[r^2 - c^2]$



Behind first point

- $d = \text{Norm}[x-a]$



Beyond second point

- If $c > ab$
 - $d = \text{Norm}[x-b]$

