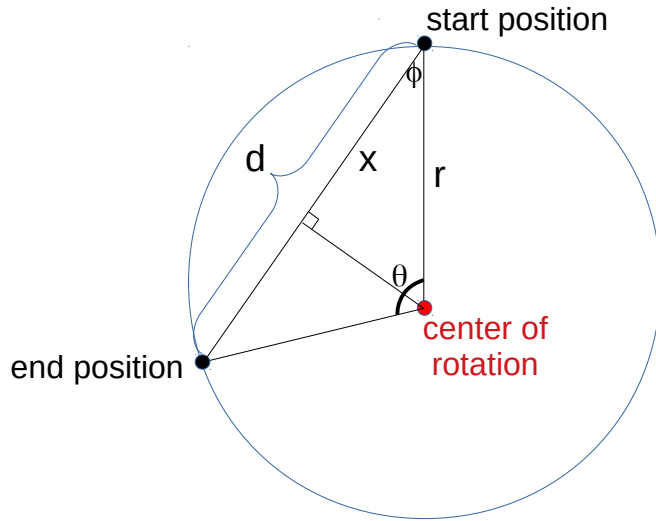


# Calculating Center of Rotation Based on Turn Results



Given start and end poses,  
first calculate actual  $d$  and  $\theta$ .  
Then:

$$\phi = \pi/2 - \theta/2$$

$$x = d/2 = r \cos \phi = r \sin \theta/2$$

$$r = x / (\sin \theta/2) \\ = (d/2) / (\sin \theta/2)$$