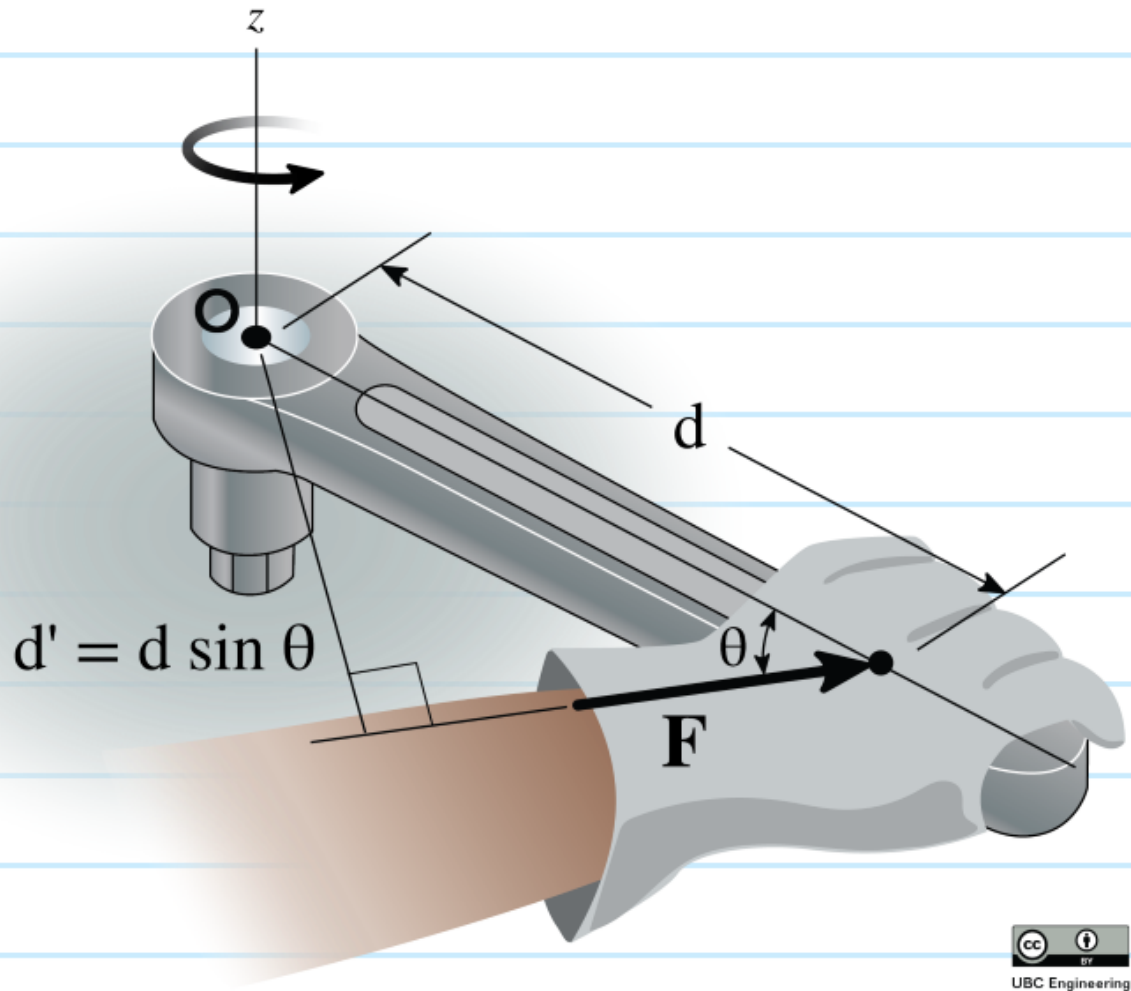
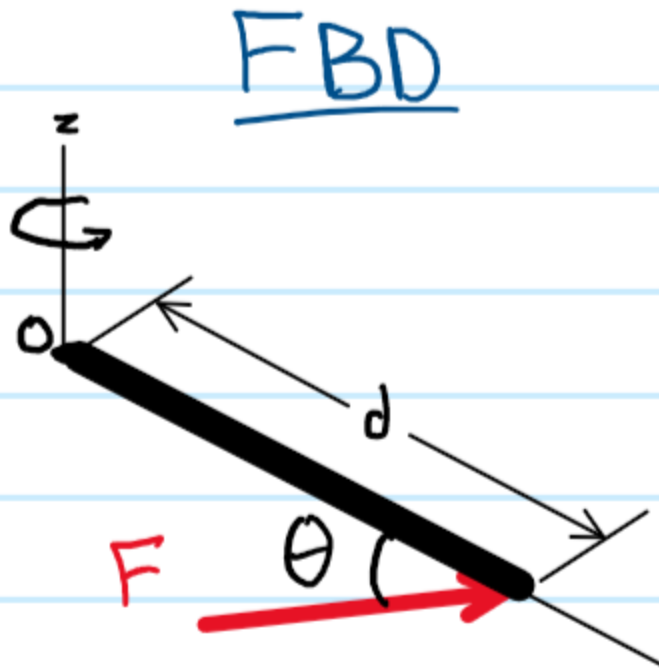


21-5-4-1-GD-001



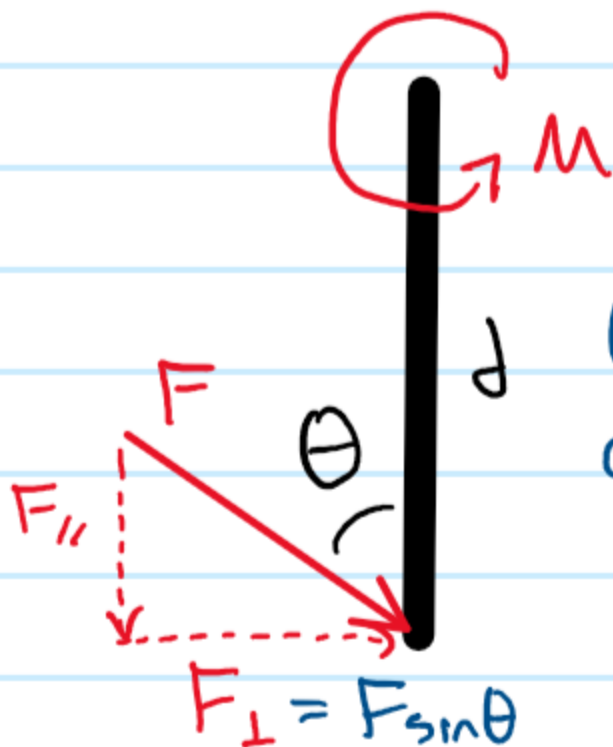
A mechanic is applying torque to a bolt using a  $d$  m wrench. The mechanic is applying  $F$  N at  $\theta$  degrees from the wrench. What is the magnitude of the moment on the bolt?

given  $d, F, \theta$   
Find  $M$



Moments

$$\underline{M = (F \sin \theta)(d)}$$



Only  $F_{\perp}$  contributes to  $M$