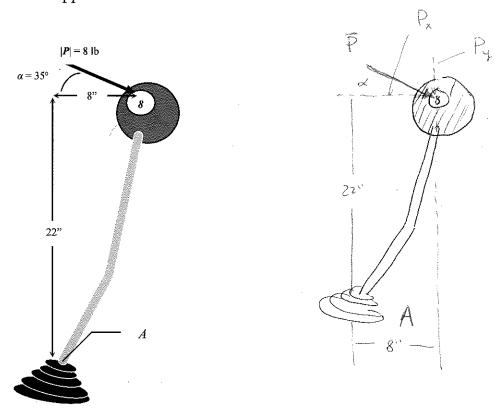
Sophomore Engineering Curriculum

Conservation & Accounting Principles

Example

A force of 8 lbs is applied to the gearshift as shown in the figure. Calculate the moment about point A due to the applied force.



Easiest method is to break
$$\overline{P}$$
 into components:

$$A = -(22")[P \cos d] = (8")[P \sin d]$$

$$= -(22 in)(8 lb \cos 35°) - (8 in)(8 lb \sin 35°)$$

$$= [-181 in-lb]$$