

RECALL
Torque (τ)

The **rotational effect** caused by a force acting some distance from the center of mass is a torque. (Nm)

$$\tau = r F \sin\theta$$

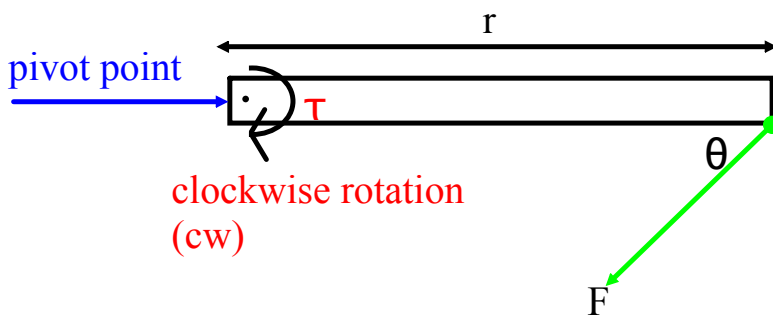
* not given

τ = torque (Nm)

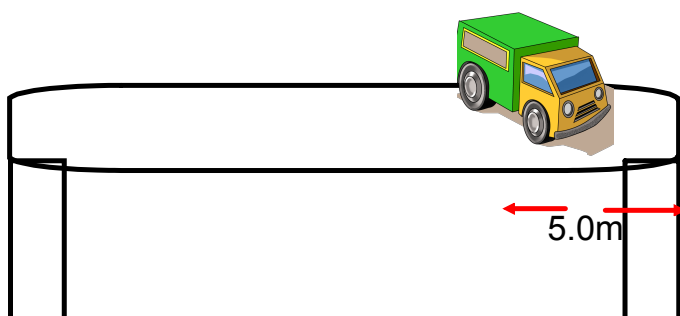
r = lever arm (m)

F = applied Force (N)

θ = angle between r and F ($^\circ$)



A uniform 20.0m long bridge has a mass of 1500kg. It supports a 4200kg transport truck. Calculate the force provided by each support.



P. 266

#2, 3, 5, 6, 7, 8, 15