### Sample Calculations

1. Torque

Object



Force Applied = 2000 N

Object’s mass = 50 kg

θ = rad = 7.5 ᵒ

r = 5 m

Object applying force

Center of Mass

Distance from axis

Triangular part

Base = 6m

Height = 8m

Rectangular part

Height = 8m

Base = 16m

CoG = (B/2, H/2)

“Void” space

Radius = 2 m

CoG = center

Y - Axis

X - Axis

= 0

= 0