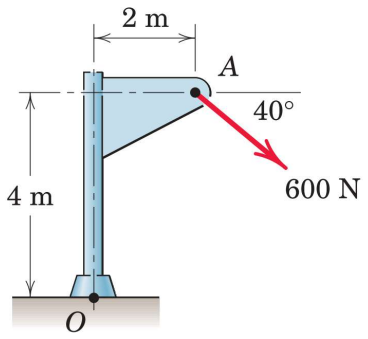
University of Mohamed Khider, Biskra.
Department of Civil Engineering and Hydraulics.
Year: 2023/2024
2nd Year Under-graduation
Engineering Mechanics- Statics

Moment calculation

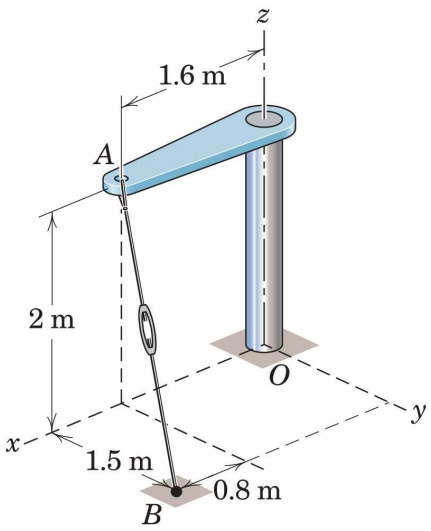
Problem 1:

Calculate the magnitude of the moment about the base point *O* of the 600-N force (Fig.1).



Problem 2:

The turnbuckle is tightened until the tension in cable *AB* is 2.4 kN. Determine the Cartesian form of the moment about point *O* of the cable force acting on point *A* and the magnitude of this moment (Fig.2)



Problem 3:

Determine the moment of force **F** about point ***O***. The force has a magnitude of 800 N and coordinate direction angles of $\theta_x = 60°$, $\theta_y = 120°$, $\theta_z = 45°$. Express the result as a Cartesian vector. (Fig.3)