Formulas

$\Sigma F=0$

$\tau=rF\sin\theta$

$\Sigma\tau=0$

Key Concepts

F_{net} is a vector → decompose to $\Sigma F_x=0$ and $\Sigma F_y=0$

θ = the angle the rope/wire makes with the "ceiling"

Translational Equilibrium: (in this course) zero velocity systems

Rotational Equilibrium: involves a pivot and lever → uses torque (τ)

To Remember

θ = the angle a rope/wire makes with the surface/ceiling

pivot position determines which way F is going (CW or CCW)

Slanted beams - think of them parallel to the ground and the forces slanted instead

F_N is present when rope/wire is on the ground

By **goldennfluff** (goldennfluff)

cheatography.com/goldennfluff/

Published 31st May, 2025.
Last updated 31st May, 2025.