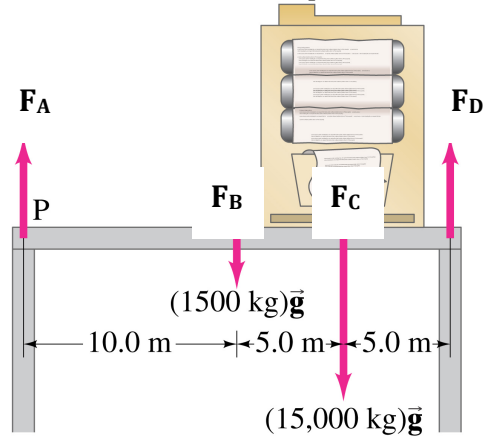


Static Equilibrium Printer example



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Torque Equation:

$$\Sigma \tau = I \alpha$$

$\alpha = 0$

$$\tau_A - \tau_B - \tau_C + \tau_D = 0$$

$$r_A F_A - r_B F_B - r_C F_C + r_D F_D = 0$$

$\alpha = 0$

$$r_B F_B + r_C F_C = r_D F_D$$

$$F_D = \frac{r_B F_B + r_C F_C}{r_D}$$

Force Equations:

$$\Sigma F_y = m a_y$$

$a_y = 0$

$$F_A - F_B - F_C + F_D = 0$$

$$F_A = F_B + F_C - F_D$$

$$\Sigma F_x = m a_x$$

$a_x = 0$

Not Applicable = 0