

Physics 231 - 15-Oct-99



- Torque
- Equilibrium
- Moment of Inertia

Torque



Equilibrium



- Translational
- Rotational
- Equilibrium and Potential Energy

Moment of Inertia



Q1 - Answer = c

Q2 - Problem A - Last name A-K

A weight W is suspended from a massless rod pivoting freely at its point of attachment to the wall. If $W = 50 \text{ kg}$, $d_1 = 50 \text{ cm}$, $d_2 = 100 \text{ cm}$ and $\theta = 30^\circ$, what is the tension T in the slanted rope?

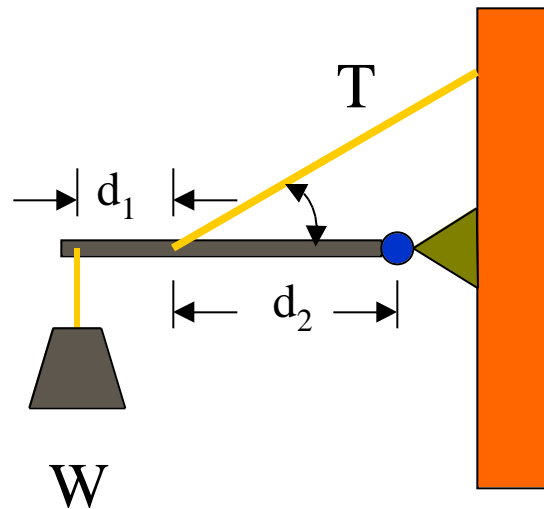
A. 245

B. 1470 N

C. 490 N

D. 850 N

E. $1.5 \times 10^5 \text{ N}$



Q1 - Answer = c

Q2 - Problem B - Last Name L-Z

- A weight W is suspended from a massless rod pivoting freely at its point of attachment to the wall. If $W = 40 \text{ kg}$, $d_1 = 33 \text{ cm}$, $d_2 = 67 \text{ cm}$ and $\theta = 45^\circ$, what is the tension T in the slanted rope?

- A. 554
- B. 392 N
- C. 196 N
- D. 827 N
- E. $5.5 \times 10^5 \text{ N}$

