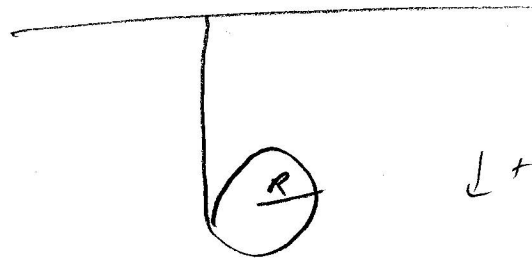


C-22-5-092



$$\left\{ \begin{array}{l} mg - T = ma \\ TR = I\alpha = I \frac{a}{R} \end{array} \right.$$

$$a = \frac{mgR^2}{I + mR^2}$$

$$T = \frac{mgI}{I + mR^2}$$

$$I = \int_0^{2\pi} d\varphi \int_0^R r dr \cdot \sigma r^2$$

$$= 2\pi \frac{R^4}{4} \sigma$$

$$M = \pi R^2 \sigma$$

$$I = \frac{1}{2} mR^2$$

$$\Rightarrow a = \frac{2}{3}g$$

מסתכלים על המסה כעל דיסקים דקים

$$I = \sum_i m_i r_i^2 = R^2 \sum_i m_i = mR^2$$

$$\Rightarrow a = \frac{g}{2}$$