

2000 普通物理(2)

答案

2解 (1) 桌面撤去：物体A： $\Sigma F = 0$ ， $a_A = \frac{\Sigma F}{m_A} = 0$ 物体B： $\Sigma F = (m_A + m_B)g$

$$a_B = \frac{(m_A + m_B)g}{m_B} = 2g$$

(2)

$$k(x_2 - x_1) = m_B g = k\left(\frac{N}{k} - \frac{m_A g}{k}\right)$$

$$\text{压力 } N_{\min} = (m_A + m_B)g$$

1解

$$\frac{1}{2} I \omega_0^2 + 2mgR = \frac{1}{2} I \omega^2 + \frac{1}{2} (2m)(R^2 \omega^2 + v^2)$$

$$I \omega_0 = (I + 2mR^2) \omega$$