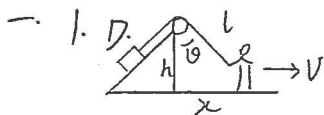


# 答案、学长笔记、辅导班课程、访问：W

2010年中科院普通物理甲考研真题答案

普通物理(甲) 2010年

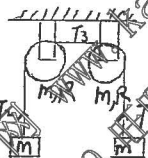


$$h^2 + x^2 = l^2 \quad \text{两边求导, 即: } x \frac{dx}{dt} = l \frac{dl}{dt}$$

$$v_{\text{块}} = v_{\text{人}} \frac{x}{l} = v_{\text{人}} \sin \theta \quad \text{是匀速运动}$$

$$a_{\text{块}} = v_{\text{人}} \cos \theta = a \quad \text{加速度在变, 故为D.}$$

2. B.



$$mg - T_1 = 4ma$$

$$\therefore a = R\beta$$

$$T_2 - mg = ma$$

$$\text{联立求解: } a = \frac{g}{2}, T_3 = \frac{5}{4}mg$$

$$T_1 R - T_3 R = \frac{1}{2} m R^2 \beta$$

$$T_3 R - T_2 R = \frac{1}{2} m R^2 \beta$$