

Subiectul A. MECANICĂ

Nr. item	Soluție/Rezolvare
III.a.	$L = m_1gh_1$ Rezultat final: $L = 200J$
b.	$\Delta E_p = -L_{cons}$ $\Delta E_p = -m_2gh_2$ Rezultat final: $\Delta E_p = -200J$
c.	conservarea energiei mecanice $v_1 = \sqrt{2gh_1}$ $v_2 = \sqrt{2gh_2}$ $\frac{v_1}{v_2} = \sqrt{\frac{h_1}{h_2}}$ Rezultat final: $\frac{v_1}{v_2} = \sqrt{2} \cong 1,41$
d.	$\Delta t = \frac{h}{v_m}$ $v_m = \frac{v}{2}$ $\frac{\Delta t_1}{\Delta t_2} = \frac{h_1}{h_2} \cdot \frac{v_2}{v_1}$ Rezultat final: $\frac{\Delta t_1}{\Delta t_2} = \sqrt{2} \cong 1,41$