

Subiectul A. MECANICĂ

Nr. item	Soluție/Rezolvare
III.a.	$\Delta E_{C_{AB}} = E_{C_B} - E_{C_A}$ $\Delta E_{C_{AB}} = -\frac{3}{8}mv_0^2$ Rezultat final: $E_{C_{AB}} = -300J$
b.	$E_{p_B} = mgh$ $h = \ell \sin \alpha$ Rezultat final: $E_{p_B} = 415,2J$
c.	$L = L_{AB} + L_{BC}$ $L_{AB} = \Delta E_{C_{AB}}$ $L_{BC} = \Delta E_{BC} = \frac{3}{8}mv_0^2 - mg\ell \sin \alpha$ $L = -mg\ell \sin \alpha$ Rezultat final: $L = -415,2J$
d.	$E_B = mgh + \frac{mv_0^2}{8} = 515,2J$ $E_C = \frac{mv_0^2}{2} = 400J$ Rezultat final: $\Delta E_{BC} = -115,2J$