Subiectul A. MECANICĂ

Nr. item	Soluţie/Rezolvare
III.a.	$\Delta E_p = mgh = mgl/2$ Rezultat final $\Delta E_p = 30kJ$
b.	$L_{F_f} = F_f \cdot \ell \cdot \cos 180^0 ; F_f = \mu mg \cos\alpha$ Rezultat final $L_{F_f} = -10380J$
c.	$L_{F_{tr}} = \lvert L_{F_f} \rvert + \lvert L_G \rvert$ $L_G = -\Delta E_p = -mgl/2$ $P_m = L_{F_{tr}} / \Delta t$ $P_m = 403{,}8W$
d.	$F_{tr} = F_f + G\sin\alpha ;$ $v = P_m / F_{tr}$ $E_c = mv^2/2$ Rezultat final $E_c = 6J$