

Subiectul A. MECANICĂ

| Nr. item | Soluție/Rezolvare |
|----------|---|
| III.a. | $E_c = \frac{mv^2}{2}$ <p>Rezultat final: $E_c = 5 \cdot 10^4 \text{ J}$.</p> |
| b. | $L = \Delta E_c$ $\Delta E_c = E_{cf} - E_{ci} \text{ cu } E_{cf} = 0$ <p>Rezultat final: $L = -5 \cdot 10^4 \text{ J}$</p> |
| c. | $L' = \Delta E'_c$ $L' = -F_f \Delta x'$ $L = -F_f \Delta x$ $\Delta E'_c = E'_{cf} - E_{ci} \quad E'_{cf} = 0,3 E_{ci}$ <p>Rezultat final: $\Delta x' = 14 \text{ m}$</p> |
| d. | $L'' = \Delta E''_c$ $L'' = -F_f \Delta x'' \text{ cu } \Delta x'' = 18 \text{ m}$ $\Delta E''_c = E''_{cf} - E_{ci}$ $E''_c = \frac{mv''^2}{2}$ <p>Rezultat final: $v'' = \sqrt{10} \approx 3,16 \text{ m}$</p> |