

Subiectul A. MECANICĂ

Nr. item	Soluție/Rezolvare
II.a.	$N = m \cdot g$ <p>Rezultat final: $\vec{N} = 5100N$</p>
b.	$\frac{F}{S_0} = E \frac{\Delta l}{l_0}$ $\Delta l_u = \frac{\mu \cdot m \cdot g \cdot l_0}{S_0 \cdot E}$ $\Delta l_u = \frac{(a + \mu \cdot g) l_0}{S_0 \cdot E}$ $\frac{\Delta l_u}{\Delta l_a} = \frac{\mu \cdot g}{a + \mu \cdot g}$ <p>Rezultat final: $\frac{\Delta l_u}{\Delta l_a} \cong 0,46$</p>
c.	$\frac{\Delta l_u}{l_0} = \frac{\mu \cdot m \cdot g}{S_0 \cdot E}$ <p>Rezultat final: $\frac{\Delta l_u}{l_0} \cong 3,18 \cdot 10^{-6}$</p>
d.	$F = \sqrt{F_f^2 + N^2}$ $F = G \sqrt{1 + \mu^2}$ <p>Rezultat final: $F \cong 5216N$</p>