

Subiectul A. MECANICĂ

Nr. item	Soluție/Rezolvare
II.a.	$m_3 > (m_1 + m_2)(\sin \alpha + \mu \cdot \cos \alpha)$ <p>Corpul 3 coboară</p>
b.	$m_1 \cdot a = T_{12} - G_{1T} - F_{f1}$ $m_2 \cdot a = T_{23} - T_{12} - G_{2T} - F_{f2}$ $m_3 \cdot a = G_3 - T_{23}$ $G_t = m \cdot g \cdot \sin \alpha$ $F_f = \mu m \cdot g \cdot \cos \alpha$ $a = g \frac{m_3 - (m_1 + m_2)(\sin \alpha + \mu \cdot \cos \alpha)}{m_1 + m_2 + m_3}$ <p>Rezultat final: <math>a \cong 0,4 \frac{m}{s^2}</math></p>
c.	$T_{12} = m_1 [a + g(\sin \alpha + \mu \cdot \cos \alpha)]$ <p>Rezultat final: <math>T_{12} \cong 9,5 N</math></p>
d.	$T_{23} = m_3 (g - a)$ <p>Rezultat final: <math>T_{12} \cong 28,8 N</math></p>