**Subiectul A. MECANICĂ**

| Nr. item | Soluţie/Rezolvare |
|---|---|
| **II.a.** | $F_{e1} = T_1 = m_1 g$ <br> $F_{e1} = k\Delta\ell_1$ <br><br> Rezultat final: $\Delta\ell_1 = \dfrac{m_1 g}{k} = 3 cm$ |
| **b.** | $m_1 g - T = m_1 a$ <br> $T - m_2 g = m_2 a$ <br><br> Rezultat final: $a = \dfrac{m_1 - m_2}{m_1 + m_2} g = 2\, m/s^2$ |
| **c.** | $T = \dfrac{2 m_1 m_2}{m_1 + m_2} g$ <br><br> $T = F_e = k\Delta\ell$ <br> Rezultat final: $\Delta\ell = 2{,}4 cm$ |
| **d.** | $R = 2T$ <br> Rezultat final: $R = \dfrac{4 m_1 m_2}{m_1 + m_2} g = 4{,}8 N$ |