Subiectul D. OPTICA

Nr. item	Soluţie/Rezolvare
III.a.	$\lambda = \frac{c}{\nu}$ $\frac{\nu_1}{\nu_2} = \frac{\lambda_2}{\lambda_1}$ rezultat final: $\frac{\nu_1}{\nu_2} \cong 1{,}54$
b.	$hc / \lambda_1 = L_e + eU_{s1}$ $hc / \lambda_2 = L_e + eU_{s2}$ $U_{s1} = fU_{s2}$ $L_e = \frac{hc}{(f-1)}(\frac{f}{\lambda_2} - \frac{1}{\lambda_1})$ rezultat final: $L_{ex} \cong 2{,}2 \cdot 10^{-19} J$
c.	$hc / \lambda_2 = L_e + E_{c2}$ $E_{c2} = \frac{hc}{\lambda_2} - L_e$ rezultat final: $E_{c2} \cong 6{,}9 \cdot 10^{-20} J$
d.	$\frac{\nu_1}{\nu_2} = \sqrt{\frac{E_{c1}}{E_{c2}}}$ rezultat final: $\frac{\nu_1}{\nu_2} \cong 1{,}81$