سؤال 4

KCL @ A: $\frac{i_o}{3} = I_1 + I_2$ III

KCL @ 1: $I_1 = i_o - I_T$ II

KCL @ V_T: $I_2 = \frac{V_T}{4} - I_o$ I

I & II in III

$i_o = 3\left(\frac{V_T}{4} - I_T\right)$

KVL @ 1: $\frac{V_T}{I_T} = \frac{13}{3} = 4.3\,\Omega$