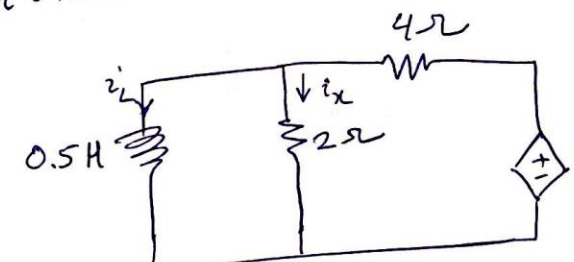
$Q_4, V1$:

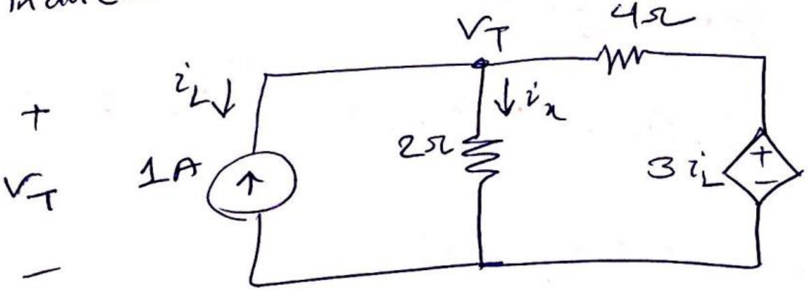
For $t<0$: $\frac{10}{1} + \frac{3 i_L(t)}{4} = i_L(t) \rightarrow i_L(t) = 40\ A$

$\rightarrow i_L(0) = 40\ A$

For $0<t<1$:



To find R_{th} of the circuit connected to the inductor:



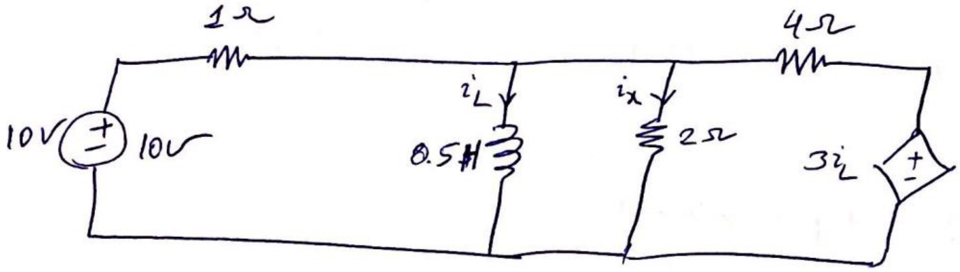
$$-1 + \frac{V_T}{2} + \frac{V_T + 3}{4} = 0 \rightarrow V_T = 1/3\ V$$

$$\rightarrow R_{th} = 1/3\ \Omega, \quad \tau = L/R = \frac{0.5}{1/3} = 1.5\ s$$

$$i_L(t) = I_0 e^{-t/\tau} \Rightarrow i_L(t) = 40 e^{-t/1.5}$$

$$i_L(1) = 40 e^{-3/2} = 20.5367\ A$$

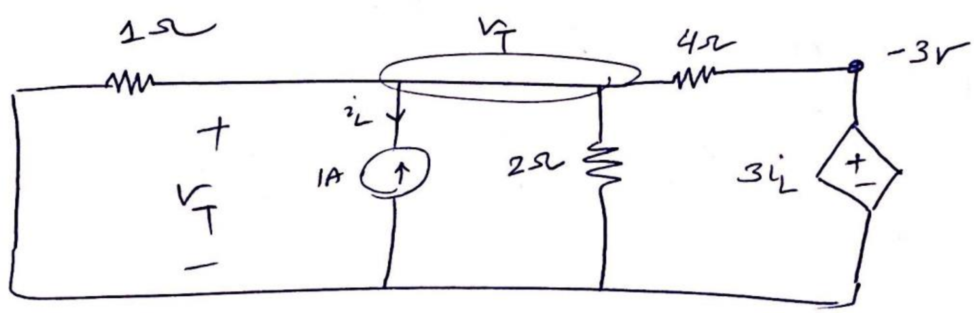
For $t > 1$



$i_L(1) = 20.5367$

$i_L(\infty) = 40\ A$

For finding R_{th}:



$$\frac{V_T}{1} + \frac{V_T}{2} - 1 + \frac{V_T + 3}{4} = 0 \longrightarrow V_T = 1/7\ V$$

$R_{th} = 1/7\ \Omega$

$$i_L(t) = i_L(\infty) + \left(i_L(1) - i_L(\infty)\right) e^{-(t-1)/\tau}$$

$$i_L(t) = 40 + (20.5367 - 40)\, e^{-(t-1)/(0.5/(1/7))}$$

$$\Rightarrow i_L(t) = 40 - 19.4633\, e^{-\frac{t-1}{3.5}}$$

$$i_L(t) = 40 - 25.9001\, e^{-t/3.5}$$

$$V_L = L\frac{di_L}{dt} = 3.7\, e^{-t/3.5}$$

$$i_x(t) = \frac{V_L(t)}{2} = 1.85\, e^{-t/3.5}$$

$$i_x(2) = 1.85\, e^{-2/3.5} = \boxed{1.0447 \ A}$$