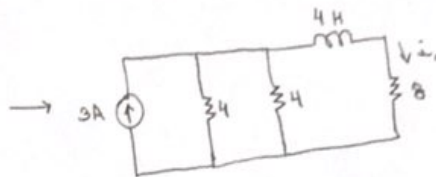
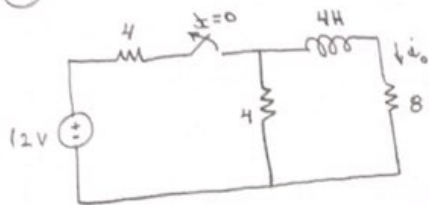
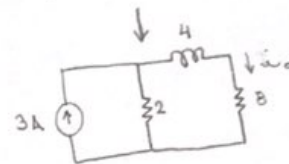


1

2



$$R = 4 \parallel 4 \\ = 2 \Omega$$



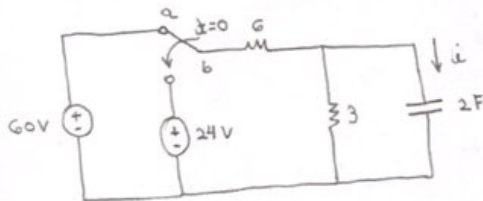
$$i_o(0) = \left(\frac{2}{2+8} \right) \cdot 3 = 0,6 \text{ A}$$

$x > 0$:

$$\tau = \frac{L}{R} = \frac{4}{4+8} = 0,333$$

$$i_o(x) = 0,6 e^{-3x} \text{ A} //$$

3



$$R_{eq} = 6 \parallel 3 \\ = 2 \Omega$$

$$\tau = 2 \cdot 2 = 4 \text{ s}$$

$$v(0) = \left(\frac{3}{3+6} \right) \cdot 60 = 20 \text{ V}$$

$$v(\infty) = \left(\frac{3}{3+6} \right) \cdot 24 = 8 \text{ V}$$

$$v(x) = v(\infty) + (v(0) - v(\infty)) e^{-x/\tau}$$

$$v(x) = 8 + (20 - 8) e^{-x/4} = 8 + 12 e^{-x/4}$$

$$i(x) = -\frac{1}{4} e^{-x/4} \cdot 2 \cdot 12 = -6 e^{-0,25x} \text{ A} //$$