

EE202 Homework 2

- (1) Find the steady state expression for $i(t)$ in the circuit in Fig. 1 if $v = 750 \cos(5000t)$ (mV).

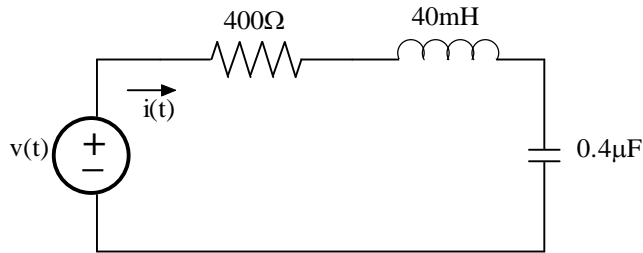


Fig.1

- (2) Find the steady state expression for $v(t)$ in the circuit in Fig. 2 if $i = 200 \cos(5000t)$ (mA).

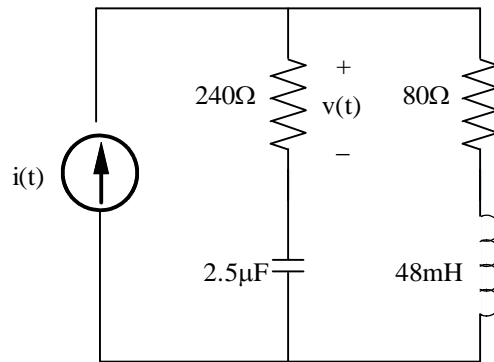


Fig.2

- (3) Find the Thevenin equivalent circuit with respect to the terminals a, b for the circuit in Fig. 3.

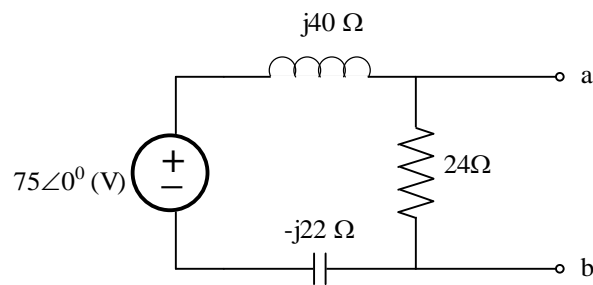


Fig.3