

Electrical Engineering Technology

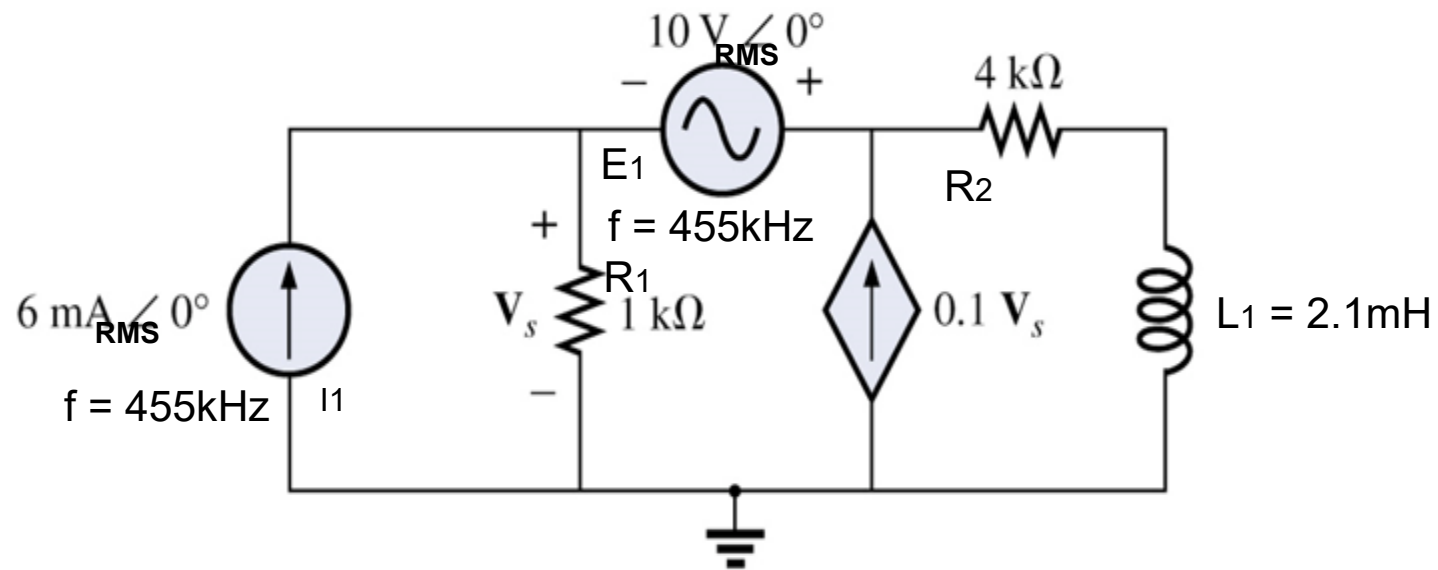
MESH Analysis II

Spring 2019 (2185)

MESH Analysis II

- **ICP with multiple current sources**

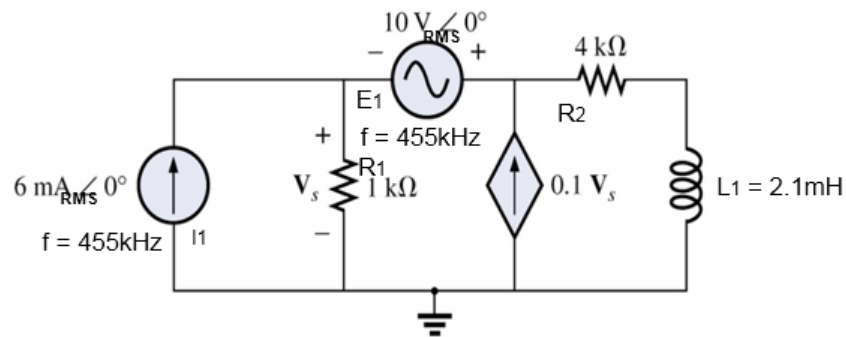
In Class Problem (also a modified homework problem)



Find:

- The current through the inductor

In Class Problem (also a modified homework problem)



Convert to the phasor domain, draw the impedance boxes and mesh currents:

$$\begin{aligned}\vec{Z}_1 &= 1000 \Omega \\ \vec{Z}_2 &= 4000 \Omega \\ \vec{Z}_3 &= jX_L = j2\pi fL \\ &= j(2\pi)(455\text{kHz})(2.1\text{mH}) \\ \vec{Z}_3 &= j6004 \Omega\end{aligned}$$

