

Problem 1

Given the impedance model of the following circuit,

1. Obtain the Thevenin equivalent circuit seen at terminals a-b;
2. Assume a 20Ω resistor is connected between terminals a and b . Write the current that would flow through the resistor in the time domain (assume input frequency $= \omega$ is given).

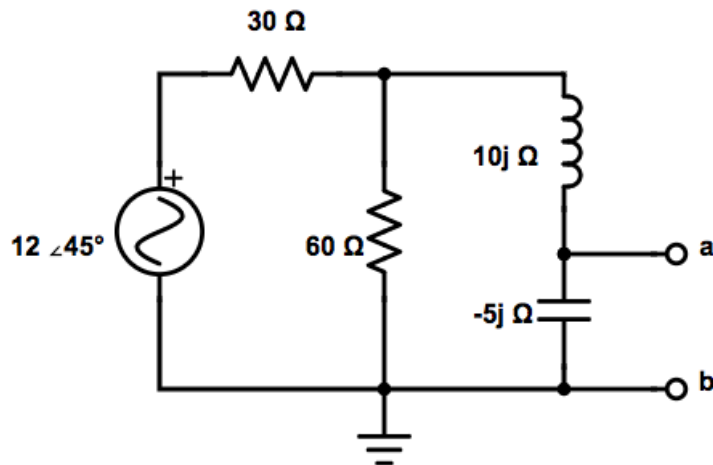


Figure 1