

ET 332b  
Single Phase Ac Circuit Analysis

The circuit below has the following component values:

$$\begin{array}{lll} R_1 = 3 \, \Omega & X_{L1} = 5 \, \Omega & \\ R_2 = 10 \, \Omega & X_{L2} = 7 \, \Omega & X_C = 50 \, \Omega \end{array}$$

$$E = 240 \angle 0^\circ$$

Find the total source current  $I_T$  and the voltage between the points A and B on the diagram below. (Voltage across equivalent of all components  $R_2$ ,  $X_{L2}$ , and  $X_C$ .)

