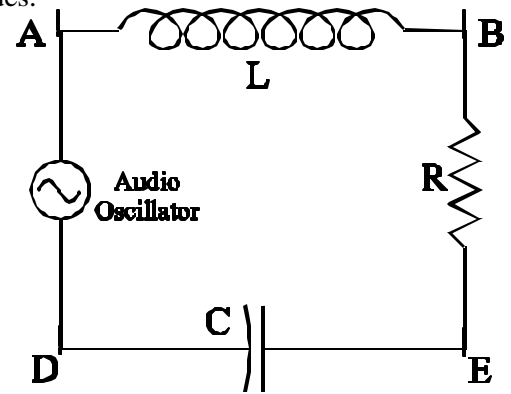


NAME _____
PERIOD _____

QUIZ#33 D
RCL Circuits

An electrical circuit is assembled as shown to the right with the following values:
 $R = 35 \Omega$, $L = 150 \mu\text{Henry}$, $C = 880 \mu\text{Farad}$ and an audio oscillator which has an output impedance of 50.0Ω while generating a frequency of $f = 1200 \text{ Hz}$. with an EMF of 62.0 Volts RMS .



1. What is the impedance of this circuit at the given frequency? [3 pts]
2. What will be the RMS current flowing in this circuit? [3 pts]
3. To what frequency should the power supply be adjusted in order to generate resonance in this circuit? [3 pts]
4. How will the voltage between point A & B in the circuit compare with the voltage between points A & D? [3 pts]
5. How much power will be delivered to this circuit while at resonance? [3 pts]