



In the two ac circuits shown the ammeter and voltmeter readings are rms values.

- (a) In the circuit on the left, find the resistance  $R$  of the resistor, the capacitance  $C$  of the capacitor, the impedance  $Z$  of the two devices combined, and the voltage  $\mathcal{E}_{rms}$  of the power source.
- (b) In the circuit on the right, find the capacitance  $C$  of the capacitor, the inductance  $L$  of the inductor, the impedance  $Z$  of the two devices combined, and the rms value of the current  $I_4$ .

