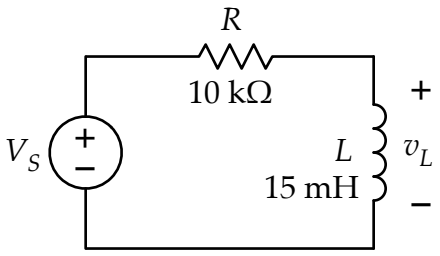
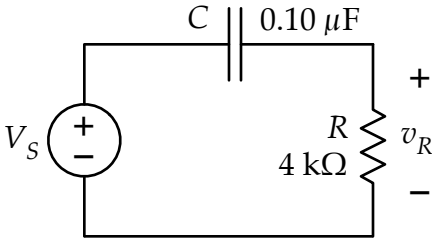
EE 201 — HW 7.7 Name_____

a. In the circuit at right, $V_s = (8\text{V})\cos\omega t$. Find the frequency ($f$ not ω) for which the *magnitude* of v_L is 2 V. Calculate the phase of v_L at that frequency.



$f =$ _____ $\theta_L =$ _____

b. In the circuit at right $V_s = (8\text{V})\cos\omega t$. Find the frequency ($f$ not ω) for which the *phase* of v_R is +45°. Calculate the magnitude of v_R at that frequency.



$f =$ _____ $\left|\tilde{\mathbf{V}}_\mathbf{R}\right| =$ _____

Write your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.