

Raymond Gallagher
Engineering 210
Quiz #11
Post-Mortem

Class,

Quiz #11 is done and finalized. All papers have been graded and returned to the Glennan labs. Please check blackboard for errors and contact me if there are any.

Solutions for quiz #11 are up on the website.

The average for quiz #11 is 13.76.

Problem 1:

Most of this quiz was based on how well you were able to perform phasor math. If you had major difficulties, you should review the posted solutions and lectures associated with that. Or ask a TA for help and come to the final exam review session. ;-)

The biggest trick with this problem was to note that the middle term was a sin function, not cos, as is needed for phasors. Converting from sin to cos involves subtracting 90 degrees (or $\pi/2$ radians) from the phase, giving $80\cos(\omega t + 45\text{degrees})$ in this case.

Other than that, remember that it is easiest to add and subtract phasors (or any complex numbers) in rectangular form, and to multiply or divide them in polar form.

Problem 2:

Again, since the voltage was given as a sine, you needed to convert it to a cosine. Also note that the units were MILLIVolts.

Make sure you know the difference between the impedance formulas for inductors and capacitors!

Once you get past the phasor concept, this is just a simple Ohm's law circuit. Hopefully you didn't forget all of the basic circuit analysis we did in the first half of the semester.