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Engineering 210
Quiz #9
Post-Mortem

Class,

Quiz #9 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 #9 are up on the website.

The average for quiz #8 is 15.18.
The average for quiz #8 FOR THOSE THAT CAME TO THE RECITATION was 17.7.

Post Quiz Analysis

Problem 1:
Know the formula to find the time constant. Failing that, know the formula for an Exponential Decay, you can use it to derive the time constant.

One thing to pay attention to, is that if the problem is an exponential, and the value at 2 seconds is less than the time at 0 seconds, then the value at 4 seconds should be even less than that.

Problem 2:
The easiest way to find these was in reverse order from what was given on the quiz. Ts came straight from the text (or with a small formula). As described in the book and at recitation, it is, simply, the distance to either the first positive peak after 0, or the nearest positive peak to 0 (either answer was accepted).

Know the difference between omega and f! Also, be aware that there is a difference between Hertz (Hz, the units for cyclical frequency) and radians per second (1/s, the units for radial frequency).

Also, be careful of your engineering prefixes on units, especially when they're in the denominator (as they are in this problem for omega = 2 * PI / To).

For A, you can't just assume that it's going to be 12 (that's only for exponentials). In fact, if the first positive peak after zero is at 4us, and the period is 5us, A (which simple knowledge about the cosine function will tell you is the maximum value for v(t)) can't be 12.

Also, note that the units for omega were in radians per second, so your calculator should not be set to Degrees when doing trig functions!