

ECE 2A Lab 3 Pre-Lab Questions

1. Read sections 5-4 and 5-6 of the Thomas and Rosa text book, or any other reference which defines attributes of time-varying waveforms. Pay particular attention to the terms defined in bold, such as **amplitude**, **period**, **peak-to-peak**, **dc component**, and **root-mean-square**. Example 5-7 will be helpful. Also review the sections of the equipment information document (class website) concerning the function generator and oscilloscope.
2. When taking measurements with our Tektronix oscilloscopes, which measurement type would you select to find the dc component of a waveform?
 - a) Cyc RMS
 - b) Mean
 - c) Period
 - d) Pk-Pk
 - e) Freq

3. What is the dc component of the waveform described by the following function?

$$v(t) = 2.5 + \sqrt{\pi} \cdot \sin(2\pi \cdot 10.4MHz + \pi / 4)$$

4. For the waveform shown, identify the following:

- a) dc component
- b) peak-to-peak voltage
- c) ac peak amplitude
- d) period
- e) frequency

