The objective of this experiment is to investigate the relationships between different voltages and currents in a three phase circuit.

Laboratory Equipment:
This lab will make use of:
1) 120/208 V three phase supply
2) load cart
3) power meters
4) amp meters
5) volt meters

The lab will consist of connecting the voltage source to the load cart. The voltage source is Y connected and the load cart can be connected as either a Y or Δ load. The first part of the lab will look at power measurements, comparing the 3 phase digital watt meter, voltage and current measurements, and the two watt meter method. The second part will look at the voltages and current in a Y load. The final part will look at the currents in a Δ load.

To Do:
1) Review your class notes and do/review your homework on three phase circuits. This lab will focus on voltage and current relationships in wye- and delta-connected sources and loads and the lines that connect them, power triangles, etc.
2) Study and understand Section 3.4.6 (pg 53-54) in the text on the two watt meter method for calculating real and reactive power.
3) Bring this document, the Lab #4 document, and the Power Laboratory Procedures document (part of the first prelab) to the lab.

These are to be handed in before lab:
MAKE A COPY FOR YOURSELF BEFORE HANDING IT IN
4) Work out problem 3.27 (pg 62), parts a, b, c, and e.