HW 28 to 34

28- 1. A 56 ohm resistor is in series with a 220 ohm inductor. The source is V = 6 angle 0 degrees. Find ZT and I.

28- 2. A 2 Kohm resistor is in series with a 3 Kohm capacitor. The source is V = 10 angle 0 degrees. Find ZT and I.

29- Given an R-L circuit with R = 15 ohms, XL = 7 ohms, and E = 2 KV angle 0 degrees, find; I, P, Q, S, Fp and sketch the impedance and power triangles.

30- A machine is rated at 56 KVA, 0.88 power factor and 760 V. Find the current, and real power in watts.

31- Given an AC machine with the following ratings; S = 95 KVA, Fp = 0.85, E = 760 V, Find 1. Qc to correct the power factor, 2. Xc 3. C 4. I uncompensated 5. I compensated