## **Homework 6 Answers**

Please be sure to clearly show your work in the solutions that you submit. Your approach is much more important than obtaining the correct numerical answer.

**Problem 8.23:** (a) pf = 0.84, lagging

**Problem 8.24:** (a) pf = 0.55, lagging; pf = 0.89, lagging; pf = 0.86, lagging

**Problem 8.25:** (a)  $\mathbb{Z}_1 = (4.55 - j5.18) \Omega$  [note different than back of book!],  $\mathbb{Z}_2 = (7.23 + j5.05) \Omega$ . (b)  $(555.0 - j3.4) V = 555 /_ -0.3^{\circ} V$