Chapter 11, Problem 72.

Two loads connected in parallel draw a total of 2.4 kW at 0.8 lagging pf from a 120-V rms, 60-Hz line. One load absorbs 1.5 kW at a 0.707 lagging pf. Determine: (a) the pf of the second load, (b) the parallel element required to correct the pf to 0.9 lagging for the two loads.