Chapter 11, Solution 83.

(a) $\overline{S} = \dfrac{1}{2}VI^* = \dfrac{1}{2}(210\angle 60^o)(8\angle -25^o) = 840\angle 35^o$

$$P = S\cos\theta = 840\cos 35^o = \underline{\textbf{688.1 W}}$$

(b) S = **840 VA**

(c) $Q = S\sin\theta = 840\sin 35^o = \underline{\textbf{481.8 VAR}}$

(d) $pf = P/S = \cos 35^o = \underline{\textbf{0.8191 (lagging)}}$