

Chapter 11, Solution 88.

(a) $\mathbf{S} = (110)(2 \angle 55^\circ) = 220 \angle 55^\circ$

$$P = S \cos \theta = 220 \cos(55^\circ) = \mathbf{126.2 \text{ W}}$$

(b) $S = |\mathbf{S}| = \mathbf{220 \text{ VA}}$