

**Chapter 9, Problem 12.**

Let  $\mathbf{X} = 4\angle 40^\circ$  and  $\mathbf{Y} = 20\angle -30^\circ$ . Evaluate the following quantities and express your results in polar form.

- (a)  $(\mathbf{X} + \mathbf{Y})/\mathbf{X}^*$
- (b)  $(\mathbf{X} - \mathbf{Y})^*$
- (c)  $(\mathbf{X} + \mathbf{Y})/\mathbf{X}$