Chapter 9, Solution 9.

(a) $(5\angle 30°)(6 - j8 + 1.1197 + j0.7392) = (5\angle 30°)(7.13 - j7.261)$
$= (5\angle 30°)(10.176\angle -45.52°) =$

$$\mathbf{50.88\angle -15.52°}.$$

(b) $\dfrac{(10\angle 60°)(35\angle -50°)}{(-3 + j5) = (5.83\angle 120.96°)} = \mathbf{60.02\angle -110.96°}.$