Problem 1.18 Complex numbers z_1 and z_2 are given by

$$z_1 = 5 \angle -60^{\circ},$$

$$z_2 = 2 \angle 45^{\circ}.$$

(c) Determine the ratio z_1/z_2 in polar form.

Solution:
(c)
$$\frac{z_1}{z_2} = \frac{5e^{-j60^{\circ}}}{2e^{j45^{\circ}}} = 2.5^{-j105^{\circ}}.$$