Problem 1.18 Complex numbers $z_{1}$ and $z_{2}$ are given by

$$
\begin{aligned}
& z_{1}=5 \angle-60^{\circ}, \\
& z_{2}=2 \angle 45^{\circ} .
\end{aligned}
$$

(c) Determine the ratio $z_{1} / z_{2}$ in polar form.

Solution:
(c) $\frac{z_{1}}{z_{2}}=\frac{5 e^{-j 60^{\circ}}}{2 e^{j 45^{\circ}}}=2.5^{-j 105^{\circ}}$.

