

PROBLEM:

Simplify the following and give the answer in polar form. Make a plot of all the vectors involved in the complex addition.

(a) $z_a = 2e^{-j5\pi/3} + e^{j5\pi/6}$

(b) $z_b = e^{j\pi/4} - e^{-j\pi/4} - \sqrt{2}e^{-j\pi}$

(c) In addition, write the MATLAB statements that will perform the addition and also display the magnitude and phase of the result. Consult `help` on the MATLAB functions `abs` and `angle`, and also the SP-First Toolbox functions: `zprint`, `zvect`, etc. Use these to check your hand calculations.