PROBLEM:

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

(a) $z_a = e^{-j(3\pi/4)} + \sqrt{2}\,e^{j(3\pi/4)}$

(b) $z_b = \sqrt{3}e^{j(5\pi/3)} + \sqrt{3}e^{j\pi/3} - 1$

(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 SP-First functions: zprint, zvect, etc. Use these to check your hand calculations in parts (a) and (b).