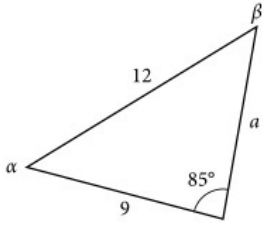| MATH 114: FALL 2021	QUIZ 10 (25PTS)

Show your work. Note, there is bonus possible if you get all correct.

Problem 1: (5pt) Find β in degrees for the following oblique triangle:

Problem 2: (5pt) Find the standard angle (in degrees) and magnitude of $\vec{A} = \langle -\sqrt{3}, -1 \rangle$

Problem 3: (5pt) Find the cartesian form of the complex number z with $|z| = 3$ and $\angle z = 240^o$

Problem 4: (5pt) Find the polar form of the complex number $z = 2 + 2i\sqrt{3}$.

Problem 5: (5pt) Let $z = 125e^{3\pi i/4}$. Find the Cartesian form of $\sqrt[3]{z}$ and plot all three elements of $z^{1/3}$ in the plot below: