

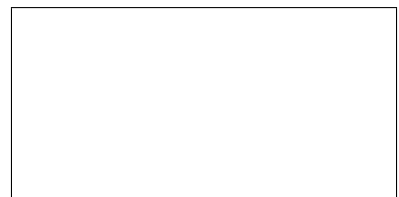
Name: _____

Show all work on the quiz in the space provided. Correct answers without work will not receive credit.

(5 points) 1. (a) On the complex plane, plot the complex number $-1 + i\sqrt{3}$ and write it in polar form.



(b) Evaluate $(-1 + i\sqrt{3})^5$, giving your answer in standard form.



(5 points) 2. Find the complex fourth roots of $81 \left(\cos \left(\frac{2\pi}{3} \right) + i \sin \left(\frac{2\pi}{3} \right) \right)$ and plot them on a complex plane. Leave your answers in polar form.