MATH 147 Review: Arithmetic for Complex Numbers

1. Plot $1 + \sqrt{3}i$.

2. Plot $2e^{\frac{\pi}{6}}$.

3. Find $z + w$, $z \cdot w$, $\frac{1}{z}$ in both rectangular and polar form where $z = \sqrt{3} + i$ and $w = 1 + \sqrt{3}i$. 