Math 1450, Honor Calculus Practice9, Fall 2015.

November 16, 2015

PSID: _____ Name: _____

1. Find the absolute value and argument of 12 + i.

2. Find the exponential form of $1 + \sqrt{3}i$.

3. Solve the following equation $x^2 - 2x + 3 = 0$.

4. Prove that the real part of z is $\frac{z+\bar{z}}{2}$ and the imaginary part is $\frac{z-\bar{z}}{2i}$.

5. Compute $(1 + \sqrt{3}i)^{12}$. (Hint: Use problem 2)