

Homework assigned Friday, January 27.

Problem 1. Compute the following

- (a) $\arg(\sqrt{3} - i)$.
- (b) $\text{Arg}(\sqrt{3} - i)$.
- (c) $\log(\sqrt{3} - i)$.
- (d) $\text{Log}(\sqrt{3} - i)$.

Problem 2. Show that $\log(zw) = \log(z) + \log(w)$.

Problem 3. Find all solutions to $\cos(z) = 3$

Problem 4. Find a general formula for all solutions to $\cos(z) = w$ and $\sin(z) = w$.