MATH 101: GRADUATE LINEAR ALGEBRA
DAILY HOMEWORK #22

Problem 22.1. Find a generator for the ideal $(85, 1 + 13i)$ in $\mathbb{Z}[i]$.

Problem 22.2. Let $\omega = (-1+\sqrt{-3})/2$, so $\omega^2+\omega+1 = 0$. Show that $\mathbb{Z}[\omega] \subseteq \mathbb{C}$ is Euclidean with respect to the complex norm.

Date: Assigned Monday, 30 October 2017; due Wednesday, 1 November 2017.