1. Do problems 2.4.4, 2.4.6, 2.5.2, 2.5.3, 2.5.4, 2.5.5

2. Prove the following. If \( a, b \in \mathbb{Z} \) such that \( b < 0 \), then there are unique \( q, r \in \mathbb{Z} \) such that \( a = bq + r \) and \( 0 \leq r < |b| \).

The grader will grade 2.5.4 and number 2 above, so you should write these up more carefully.