Fall 2022, Math 522: Preliminary Problem Set 1
Due: Wednesday, August 31st, 2022
The Division Algorithm and Greatest Common Divisors

Preliminary problems. These problems should be completed before discussion on Wednesday.

(P1) Write a complete mathematical definition of (a, b), the greatest common divisor of $a, b \in \mathbb{Z}$.

(P2) Find $q, r \in \mathbb{Z}$ so that
$$105 = 11q + r$$
with $0 \leq r < 11$, as in the division algorithm.