

Spring 2019, Math 320: Preliminary Problem Set 1
Due: Thursday, January 31st, 2019
The Division Algorithm and Greatest Common Divisors

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

(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 (Theorem 1.1).