Fall 2019, Math 620: Preliminary Problem Set 8 Due: Thursday, October 24th, 2019 A Hierarchy of Integral Domains

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

(P1) Use the Euclidean algorithm to find gcd(559, 234).

(P2) Perform the following polynomial long division.

$$x^{2} + x + 2$$
 $x^{5} + 2x^{3} + 2x + 1$