Fall 2018, Math 320: Week 2 Preliminary Problems Due: Thursday, September 6th, 2018 The Fundamental Theorem of Arithmetic

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

(P1) Write the complete mathematical definition for " $p \in \mathbb{Z}$ is prime", as well as one mathematically equivalent statement from Tuesday's lecture.

(P2) Find the prime factorizations of 60 and 126 without using a calculator.

(P3) Find all factorizations of 12, including those we consider "the same" (e.g. 12 = (-2)(2)(-3)).