

Assignment for Tuesday, 3/27 and Thursday, 3/29

I Exercises from the book:

Section 8.1 → 2ab, 3, 4, 5, 6ac, 7, 8a, 9, 10b, 12b.

Section 8.2 → 1b, 3, 4a.

II Supplementary Problems:

28 (a) First prove §8.1#6c and then use it to prove ~~§8.1#6c~~ "There are infinitely many primes of the form  $6k+1$ ".

(b) First prove §8.1#8a and then use it to prove §8.1#9.

29 Prove that the product of all the primitive roots of a prime  $p > 3$  is congruent to 1 mod  $p$ .