

Mathematics 361: Number Theory
Assignment #6

Reading: Ireland and Rosen, Chapter 5 (including the exercises)

Problems:

Ireland and Rosen, Exercises 4.8 (do this one first); 4.1,4.17,4.18; 4.2 (for $p = 7, 11, 13$),4.19; 4.9; 4.10 (since the answer involves the Möbius function, inclusion–exclusion is one way to do this); 4.13; 4.15; 4.20. (The more you use algebra, the less tedious these will be.)