

Spring 2021, Math 522: Preliminary Problem Set 5
Due: Thursday, February 25th, 2021
The Chinese Remainder Theorem

Preliminary problems. These should be submitted to Gradescope before Thursday discussion.

(P1) Determine which elements of \mathbb{Z}_6 have multiplicative inverses. For each, find the inverse.

(P2) Find a complete set of solutions to the equation $5x + 4 \equiv 2 \pmod{6}$ (it should be infinite!).