

Math 128A, problem set 11
Outline due: Wed Dec 02
Due: Mon Dec 07
Last revision due: TBA

Problems to be done, but not turned in: (Ch. 13) 1–69 odd; (Ch. 14) 1–71 odd.

Problems to be turned in:

1. (Ch. 14) 10.
2. (Ch. 14) 14.
3. Let $R = \mathbf{Z} \oplus \mathbf{Z}$. Find a subring of R that is not an ideal of R . Prove your answer, both the subring part and the “not an ideal” part. (Suggestion: For $(a, b) \in R$, what is the smallest subring containing (a, b) , and what is the smallest ideal containing (a, b) ?)
4. (Ch. 14) 26.