

Math 444 Fall 2006
Newberger

Homework 7: Section 5.3 and 5.4

Due Thursday, November 2

- I. A. (10 points) Page 128 #5.
B. (10 points) Page 128 #9. Do not use Theorem 5.10.
- II. A. (10 points) Page 128 #8.
B. (10 points) Page 128 #11. Do not use Theorem 5.10.
- III. (10 points) Page 132 #5.

*Tip:*For problems page 128 #5 and 8, find formulas for r , s , t and u in terms of a , b , c and d , such that

$$[ax + b][cx + d] = [rx + s]$$

and

$$[ax + b] + [cx + d] = [tx + u],$$

where the congruence classes are considered in the given ring.