MATH 114

Homework due Monday, November 29

7.5: 2, 4, 10, 12, 20(c), 26

Let |A| = n. How many

- (a) symmetric
- (b) both symmetric and antisymmetric
- (c) reflexive, symmetric, and antisymmetric relations are there on A?

8.1: 4, 8, 14

The following problems are optional:

7.5: 54

Let |A| = n.

- 1. How many antisymmetric relations are there on A?
- 2. (I think this problem is very hard) How many transitive relations are there on A?