

CSE 16

Homework Assignment 7

Do the following problems from *Book of Proof*:

Chapter 10 (page 195): 24, 26, 28, 32, 42

Chapter 11:

(11.1) 2, 4, 6, 8, 10

(11.2) 2, 4, 6, 12, 14, 16

Additional Problems:

For the following four problems, let A be a set with n elements: $|A| = n$.

- (1) How many relations on A are there?
- (2) How many relations on A are reflexive?
- (3) How many relations on A are symmetric?
- (4) How many relations on A are both reflexive and symmetric?