Last name _____

First name _____

LARSON—MATH 550—CLASSROOM WORKSHEET 09
Homework–Sum Rules.

Concepts & Notation

- Sec. 1.1 & Sec. 1.2 T_n, recurrence (recurrence relation), mathematical induction, basis, solving recurrences

- Sec. 2.1 $[m = n]$ notation, sum notations.

- Sec. 2.2 Two "tricks".

- Rules for sums

Homework

1. Find and solve a recurrence for the maximum number of bounded regions formed by n lines.

2. Find a formula for the *geometric series*

$$S_n = \sum_{k=0}^{n} ax^n.$$