Math 350 Assignment 3.

The "showoff problems" are starred. You are encouraged to come to my office and show me your solution. I will keep a record of people who are the first to solve any given starred problem.

Part I. Problems from Rosen's book.

- 9.2, #16 (p. 346), *#14 (p. 345)
- 9.3, #6 (p. 354), #16 (p. 354)
- 11.1, #10 (p. 412), #14 (p. 412), *#33 (p. 413)
- 11.2, #6 (p. 427), *#17 (p. 429).

Part II. *1. Let p be an odd prime number, and let a be an integer such that $(a, p) = 1$. Prove that

$$\sum_{x=0}^{p-1} \left(\frac{x(x+a)}{p} \right) = -1 \,.$$