

**Math 186, Winter 2009, Prof. Tesler**  
**Homework #8, Due Monday March 2, 2009**

Larsen & Marx **Fourth Edition:**

4.3# 2, 10, 23, 26, 29 (problems postponed from last homework)

4.3# 16, 20, 34 (more problems in the same section)

5.3# 2, 3, 4, 5

5.4# The book problems are too advanced. H-15 covers what we'll need for this class.  
and the problem below: H-15

**Problem H-15.**

- (a) Compute the sample variance and sample standard deviation in problem 5.3.2.
- (b)  $x_1, \dots, x_{10}$  have sum 30 and the sum of their squares is 100. Compute the sample mean, sample variance, and sample standard deviation of those numbers.
- (c) A survey question asks students for their annual income ranges. 5 respond \$0–\$10K, 15 respond \$10K–\$20K, 10 respond \$20K–\$30K, and 4 respond \$30K–\$40K. Estimate the sample mean, sample variance, and sample standard deviation of the annual income. Include units for each of these.