

Part III

Correlation and Regression

Chapter 8: Correlation

This chapter introduces two-variable statistics and shows a method for visual display. It then describes an important statistic that measures association, and show how to compute it. Mastery of this procedure (found in section 8.4) is an important part of the course.

Section 8.1: Suggested problems for study: A: pages 123-124: 2, 5;
less important, but useful: A: pages 122-124: 1, 3, 6

Section 8.2: Useful: box on page 126; Very Important: box on page 128.

Suggested problems for study: B: pages 129-130: 1, 2, 3, 6, 7, 9; less important: B: page 130: 4, 5, 7, 8

Section 8.3: Suggested problems for study: C: pages 131-132: (all) 1-4

Section 8.4: Important Procedure: box on page 132. Carefully practice example 1 on pages 132-133.

Suggested problems for study: D: page 134: (all) 1-4, especially 1(a) and 1(b)

Chapter Summary: page 56: points 1, 2, 3, 5, and 7 are important.

Review Exercises

Homework (pages 135, 137, and 138): 3, 9a, 9c, 10, 11 (also two problems from Chapter 9)

Comments on HW:

Be careful with problem 3. Imagine how the scatter diagram will look.

Problem 9(c): Is the answer immediate, without any calculation?

In problem 11, how will the scatter diagram look? What does that tell us about the correlation?

Also look at problems 1, 4, 5, 7, and 8 on pages 134-137,
and to a lesser extent problems 2, 6, and 12 on pages 135, 136, 139.