Chapter 10: Regression

This is an important chapter. The whole chapter—especially 10.1 and 10.3 with the worksheet modifications, and section 10.4—needs to be studied very closely.

The chapter includes an important procedure and an interesting conceptual approach to the subject.

Section 10.1: Note boxes on page 160, expecially the bottom box on page 160.

Suggested problems for study: A: page 161: 1, 3, 4, 5; and for more practice: 2.

Section 10.2: (light treatment)

Suggested problems for study: B: page 164: 3; and (less important) pages 163–164: 1 and 2.

Section 10.3: This short section is jampacked with important information.

Example 1 on pages 165–166 is a **very important procedure**. It is much simpler with the formula on the class worksheet.

Example 2 on page 166 will be **emphasized** on Test 2. It uses a dfferent approach from example 1, and the formula on the class worksheet will make this much simpler.

Suggested problems for study: C: pages 167–168: 1–3, and (less important) 4 and 5.

Section 10.4: The regression effect and the regression fallacy are very tricky at first. They are of major importance, both in the course and in real life.

The box on page 169 is important.

Carefully reread as much as is necessary the last paragraph of page 172 and all of page 173.

Optional problem: D: page 174: 2.

There are problems of interest, but they are found in the review exercises: pages 176–178: 4, 7, and 10.

Section 10.5: This is an important section that helps to explain section 10.4.

Spend a little time to try and understand the dynamics of example 3 and figure 9 on page 175.

Suggested problems for study: E: page 175: (all) 1-3

Chapter Summary: pages 176 and 177: 1 (important), 4, 5, 6.

Review Exercises

Homework (pages 176–178): 1, 2, 3, 4, 10

Comments on HW:

For problem 1, try plotting some points which meet the description.

Problems 2, 3, 4(a), and 4(b) are basic but important.

Problem 4(c) can be answered in two words, but providing an explanation is quite a challenge.

Problem 9 (not assigned) is very important, rather complicated, and somewhat tricky. For parts (a) and (b), refer to example 2 on page 166.

Problem 10 is important. It illustrates the idea of section 10.4.

Also look at problems 5, 6, 7, and 9 on pages 177 and 178, and to a lesser extent problem 8 on page 177.

Useful practice problems: ch10practice, found in this course guide.

Additional practice problem: ch10-more-practice, found in this course guide.