

## Homework Solutions

### Chapter 1 – Page 67

#### Exercise 11

- (a) The null hypothesis was supported. (That is what “not statistically significant” means.)
- (b) The question is asking whether the consumer protection agency, not the customers, registered a complaint. The answer is no, because they accepted the null hypothesis which says that the average sodium content is 250 mg.
- (c) Yes, a mistake could have been made. By that we mean a Type I or a Type II error, in this case a Type II error. That would be to conclude that the average sodium content is 250 mg when, in fact, it is more than 250 mg. (The question is not asking about other possible mistakes such as not measuring the sodium content correctly. We always assume that the procedure was carried out correctly, so any “mistakes” would be a result of getting a random sample that was not representative of the population.)