## Homework Solutions Chapter 2 – Page 107

## Exercise 17

- (a) The hypotheses (theories) are
  H<sub>0</sub>: The percentage of dissatisfied customers is 10%.
  H<sub>1</sub>: The percentage of dissatisfied customers is less than 10%.
- (b) Set the seed to 32. Then enter randInt(1,40000) and press ENTER 4 times to get the first four values. You should get 34318, 15553, 8461, and 614.
- (c) A Type II error could have been committed (not rejecting  $H_0$  when it is false).
- (d) Because the data were found to be not statistically significant, the *p*-value must be greater than 0.10. One possible value is 0.20.
- (e) No. We know that the p-value is greater than 0.10. Therefore it is also greater than 0.05.
- (f) The number 9.5% is a *statistic* because it is derived from the sample.