### 92.283 Technology Homework 2, Spring 2015-Due March 5,2015

Name: $\qquad$ Section $\qquad$
By submitting this home work for grading I am acknowledging that the work was completed by me without discussing or seeking help from others. I understand that any questions I may have must be directed to the course instructor. I further understand if this homework is submitted and it is found that any of the work is not solely my own that I am in violation of the University's Academic Integrity Policy which can result in the disciplinary action outlined in it.

Signature $\qquad$ Date $\qquad$

Use excel where feasible. For everything else show all you work.

1) Problem 5.42 from the book page 135 . You will need to download the excel as indicated in the problem. To analyze the data perform the following:
a. (20 pts) Make a scatter plot of the data using the number of stumps as the explanatory variable.
b. (20 pts) Find the least squares regression line.
c. (20 pts) What is value of $r^{2}$ ? What does it tell you?
d. (20 pts) In the context of the problem, what is your conclusion?
2. The following table shows the counts for samples of American and East Asian students at a large Midwestern university and the reason they may buy from catalogs. (This data was used for the $1^{\text {st }}$ homework. Using the excel file from it, the tab labeled "Shopping" has the data.)

| Reason | American | Asian |
| :---: | :---: | :---: |
| Save Time | 29 | 10 |
| Easy | 28 | 11 |
| Low Price | 17 | 34 |
| Live Far From | 11 | 4 |
| Stores | 10 | 3 |
| No Pressure to Buy | 20 | 7 |

a. (15 pts) Make a side by side bar chart to compare the reason for buying using a catalog for each of the groups. (hint: Convert the counts to percent for each of the groups i.e. American and Asian)
b. (10 pts)What conclusions do you have from your side by side chart?

