

Name: \_\_\_\_\_ Project #3: Analysis of 2 quantitative variables

CP Statistics

Due date: 12/4/15(B)

If you cannot hand in your project on time, you will lose 10 points each day.

### Project #3 Checklist

POINTS

Each person will collect at least 20 data.

1. **Title of the project:** (1/2 point)
2. Determine your **explanatory variable and response variable.** (1/2 point)
  - o Both must be quantitative. Leave the answers open.
3. Your **“paired-data”**: ALL answers from the people you surveyed (1/2 point)
4. **Population:** (1/2 point)
5. **Individuals:** (1/2 point)
6. Draw a **scatterplot** to display the relationship (1 points)
7. Is there any **influential point** on your scatterplot? (1/2 point)
  - Circle them on the scatterplot.

Remove the any influential data from calculator before doing the following:

8. Compute the **equation** for the Least Squares Regression Line. (2 points)
  - Draw the line on the scatterplot.
9. Compute the **correlation.** (2 points)
  - Describe the distribution: DOFS.
10. Compute and interpret the **coefficient of determination.** (2 points)
11. Draw a rough sketch of the **residual plot.** (1 point)
  - Interpret its meaning for your study. (1 point)
12. Compute the standard deviation of residuals using formula (show work) (1 point)
  - Interpret its meaning for your study. (1 point)
13. What is your **conclusion** from this survey? (1 point)

TOTAL

\_\_\_\_/15 points