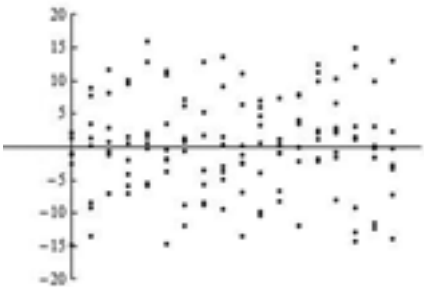


# FRIDAY, SEPTEMBER 28, 2018

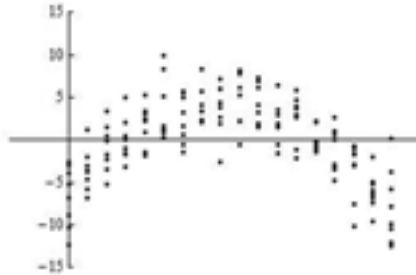
## Warm-up

Describe any pattern you see in the following residual plots (using your own words)

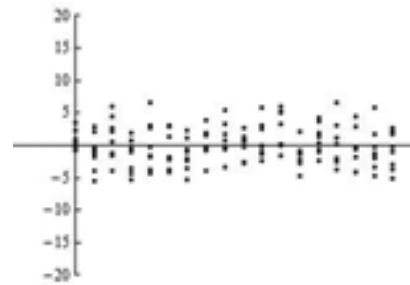
Residual Plot A



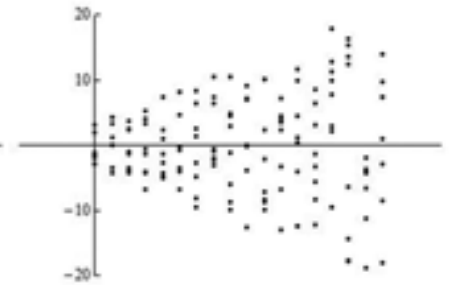
Residual Plot B



Residual Plot C



Residual Plot D



**Check Homework**

Tonight's Homework:

Page 193 (20-22)

**Cheerios Lab**

**Partners...**

## Objectives

Content: I will gather data and examine it using linear regression tools.

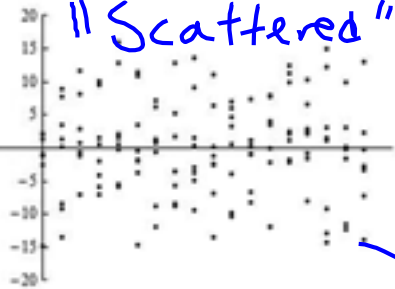
Social: I will work well with my partner, sharing the load and encouraging him/her.

Language: I will explain my reasoning clearly, using the correct vocabulary and context.



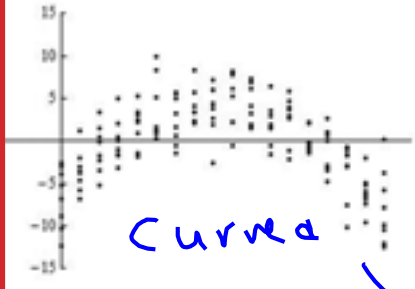
Residual Plot A

"Scattered"

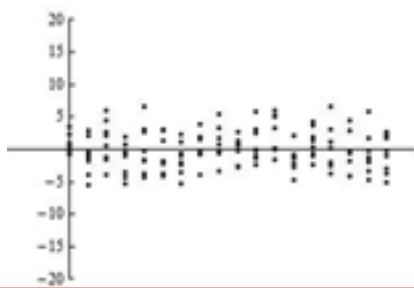


Residual Plot B

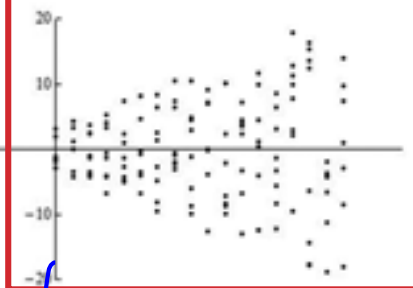
Curved



Residual Plot C

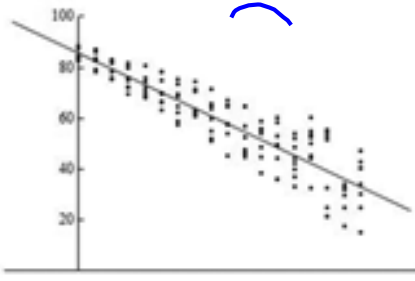


Residual Plot D



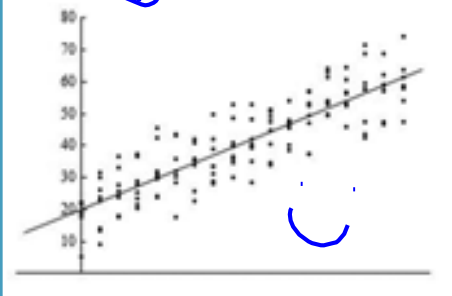
Scatterplot I

☹️



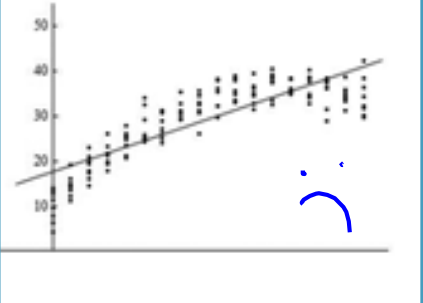
Scatterplot II

😊



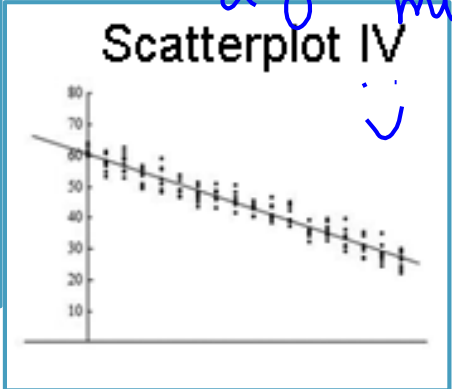
Scatterplot III

☹️



Scatterplot IV

😊



"plot thickens"

Pattern in residual plot means not a good linear model

# RECAP FROM MONOPOLY

$R^2$

## Phrases to know

**r**—“There is a positive/negative, weak/moderate/strong linear association

between explanatory variable and response variable.”

**$R^2$** —“\_\_\_ percent of the variation in the response variable can be explained by the approximate linear relationship with the explanatory variable.”

**Slope**—“For every 1 x-unit increase in the explanatory variable, our model predicts an average increase/decrease of y unit in the response variable.”

**y-intercept**—“At an explanatory variable of zero x-units, our model predicts a response variable of y-units.” (does this make any sense?)

# CHEERIOS LAB



Once data is collected,

- create & sketch the scatterplot
- create and sketch the residual plot
- determine if a linear regression analysis is appropriate



**HOMEWORK:  
P 193 (20-22)**