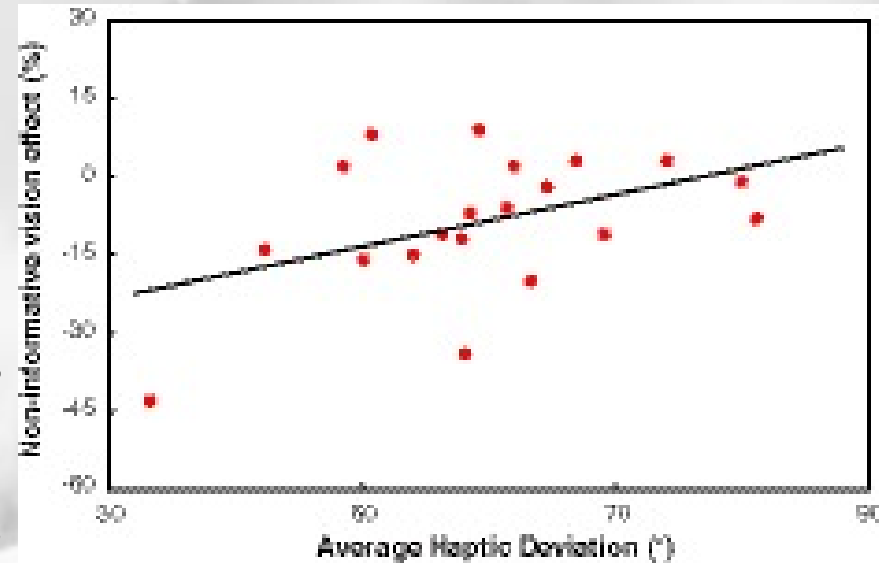


Monday, October 1, 2018

- *Warm-up*
 - Examine the scatterplot
 - Identify the unusual point in the scatterplot. unusual about it?
 - If it was removed, what would be the effect on the
 - Correlation?
 - Y-intercept of the regression line?
 - Slope of the regression line?
- *Check Homework*
- *Finish Cheerio Lab*

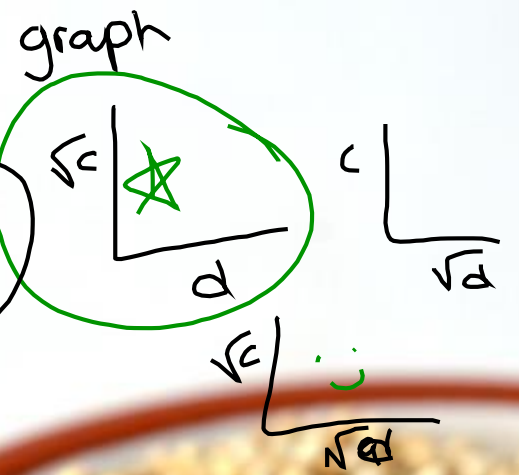


Examine Cheerios

Spreadsheet $C) \sqrt{a+d}$
 $= \sqrt{a[C]}$

$D) \sqrt{b+c}$
 $= \sqrt{b[C]}$

transforming data



Analyze Regression

Scatterplots

not linear

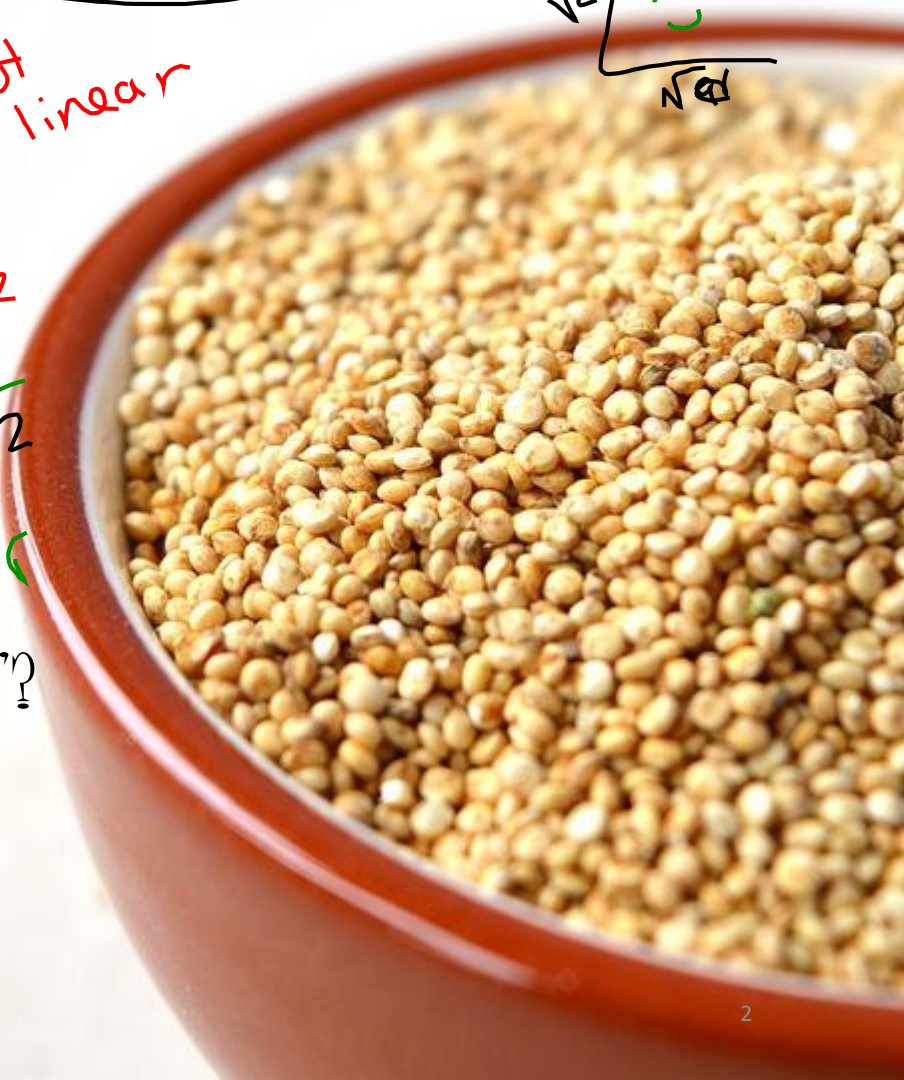
Residual Plots

Analyze Residual

Hide

- What do residual plots tell us?
- What do we do if it isn't "straight enough"?

$A = \sqrt{11} \sqrt{2}$



More Practice Straightening

Tools to Straighten

$$\sqrt{x} \quad x^2$$

$$\log(x) \quad 10^x$$

$$\ln(x) \quad e^x$$

$$\frac{1}{x} \quad x$$

3
+

Income data from the 90's	
Age (yrs)	Income (\$1000)
20	18.5
25	23.6
30	29.8
35	38.5
40	49.0
45	64.1
50	78.5
55	102.0
60	130.8

Average L & W for rockfish	
L	W
5.2	2
8.5	8
11.5	21
14.3	38
16.8	69
19.2	117
21.3	148
23.3	190
25	264
26.7	293

Diameter vs. Cost (pizza)	
Diam. (inches)	Cost (\$)
8	2.00
10	4.00
12	6.00
14	8.00
16	9.00
18	10.00
20	11.25

For each of the following:

- Scatterplot
- Linear regression
- Residual plot
- Transform...
- Test again

Homework

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(5 & 6)