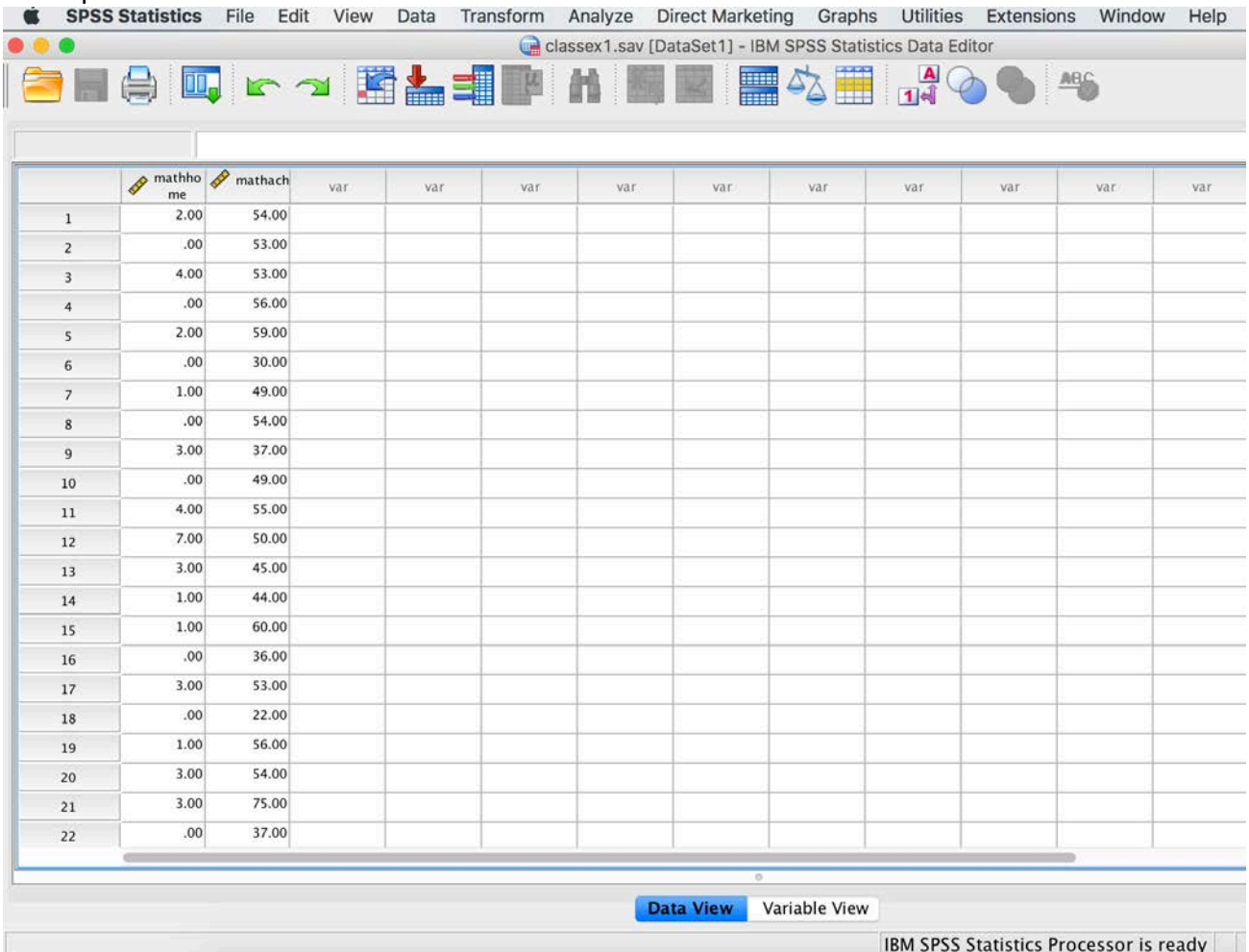


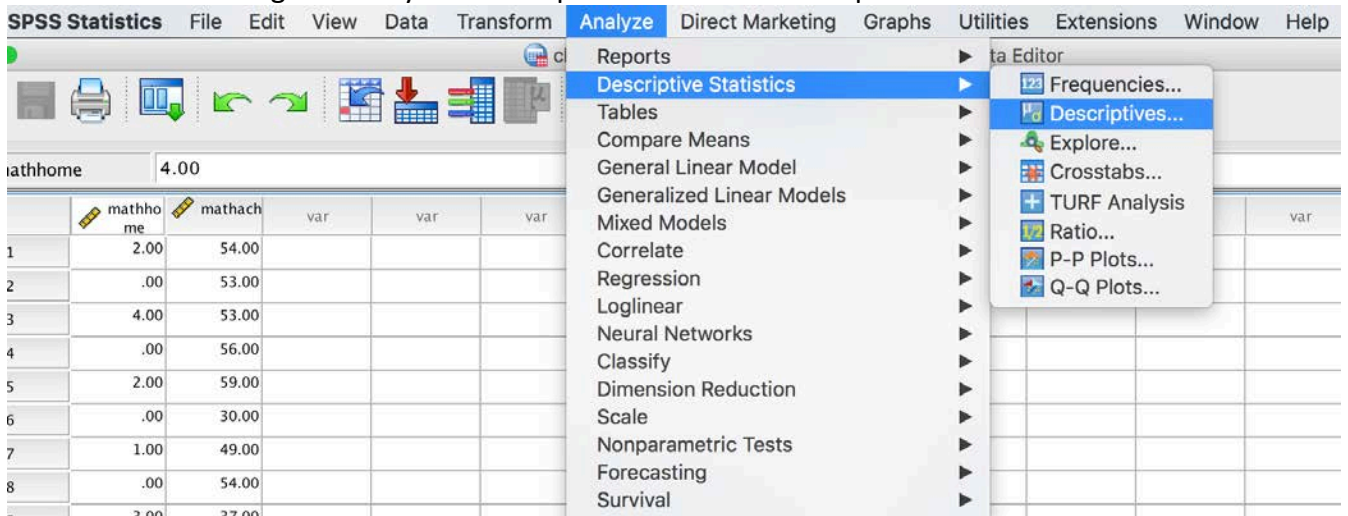
SPSS Guide

1. Open dataset

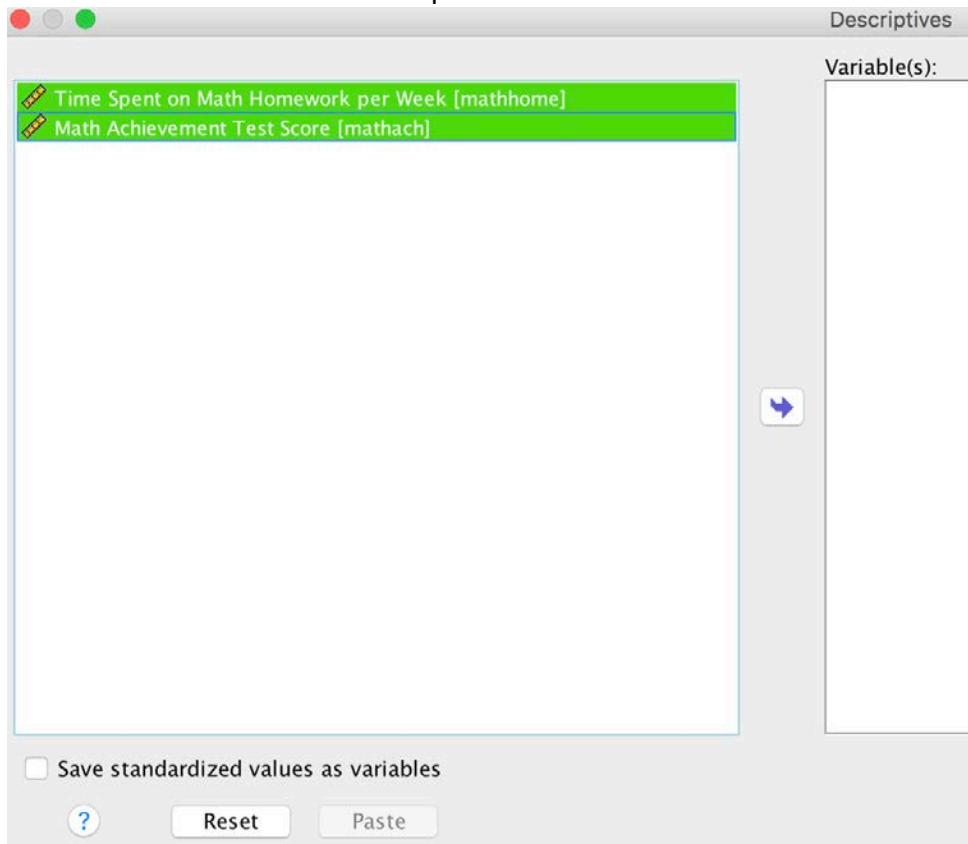


2. Run Descriptives:

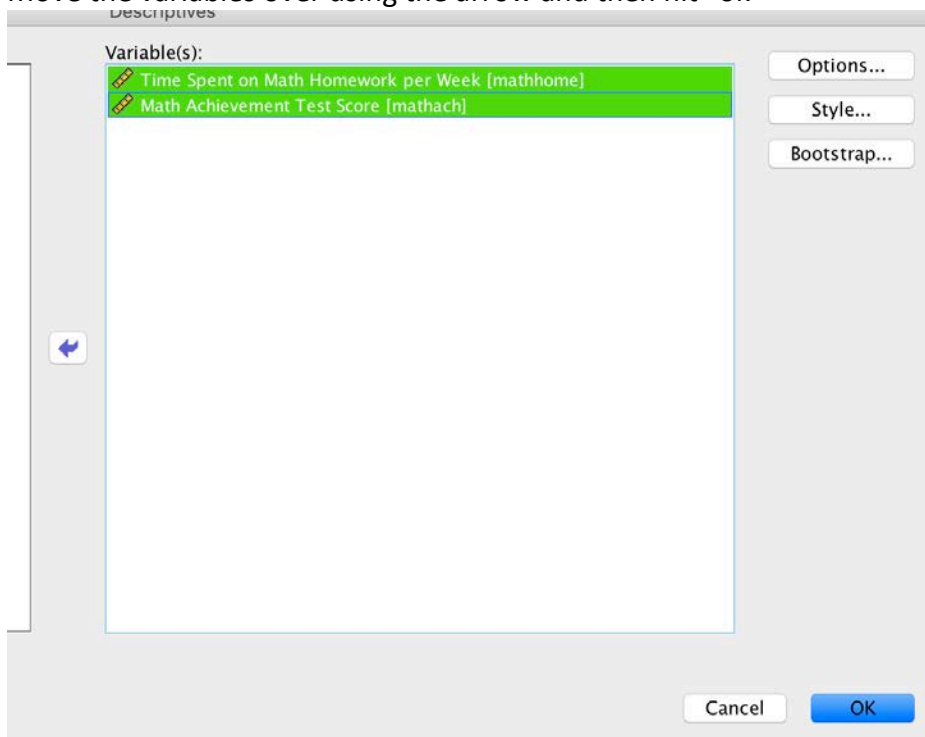
a. In the menu bar go to Analyze > Descriptive Statistics > Descriptives



b. Select the variables to run descriptives on



c. Move the variables over using the arrow and then hit "ok"



d. Look at Output for summary of descriptives

Output [Document1] - IBM SPSS Statistics Viewer

GET
 FILE=' /Users/lydiaross/Dropbox/*PHD/Fall 2017/TA-Multiple Regression/Class Data Sets/classex1.sav'.
 DATASET NAME DataSet1 WINDOW=FRONT.
 DESCRIPTIVES VARIABLES=mathhome mathach
 /STATISTICS=MEAN STDDEV MIN MAX.

→ Descriptives

[DataSet1] /Users/lydiaross/Dropbox/*PHD/Fall 2017/TA-Multiple Regression/Class Data Sets/classex1.sav

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Time Spent on Math Homework per Week	100	.00	10.00	2.2000	1.81464
Math Achievement Test Score	100	22.00	75.00	51.4100	11.28608
Valid N (listwise)	100				

3. Draw Histogram

a. Go to Graphs > Legacy Dialogs > Histograms

SPSS Statistics File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Extensions Window Help 19%

classex1.sav [DataSet1] - IBM SP

mathhome 4.00

mathhome mathach var. var. var. var. var.

1 2.00 54.00
 2 .00 53.00
 3 4.00 53.00
 4 .00 56.00
 5 2.00 59.00
 6 .00 30.00
 7 1.00 49.00
 8 .00 54.00
 9 3.00 37.00
 10 .00 49.00
 11 4.00 55.00

Legacy Dialogs

- Bar...
- 3-D Bar...
- Line...
- Area...
- Pie...
- High-Low...
- Boxplot...
- Error Bar...
- Population Pyramid...
- Scatter/Dot...
- Histogram...

b. Select the variable(s) to run plots for

Histogram

Variable: [] Title: []

Display normal curve

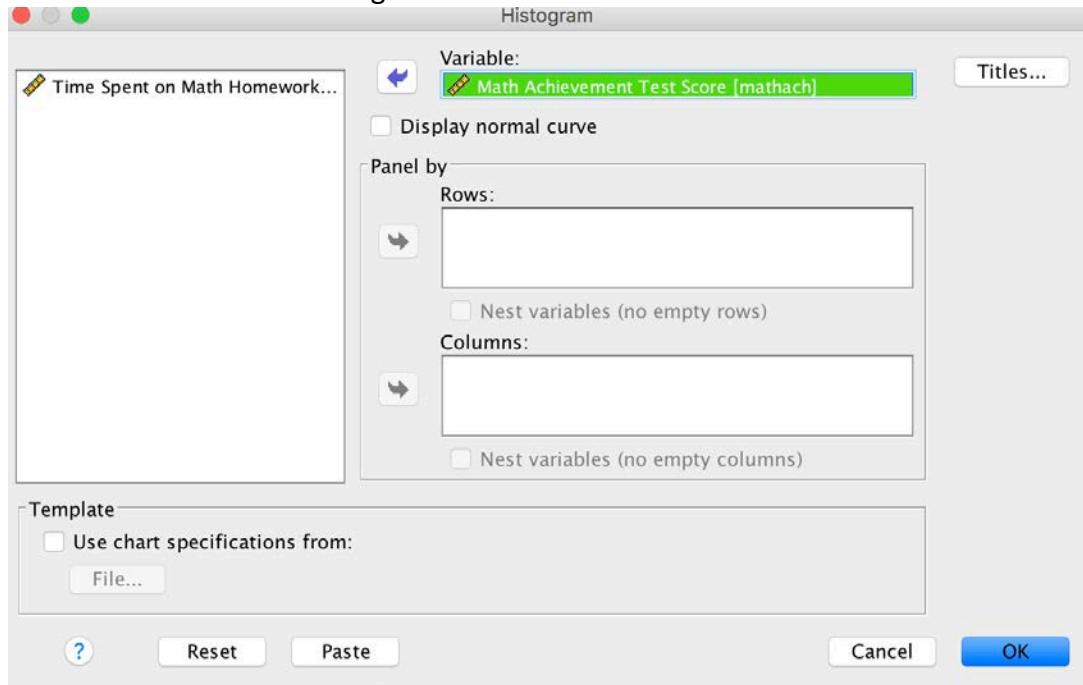
Panel by

Rows: []
 Nest variables (no empty rows)

Columns: []
 Nest variables (no empty columns)

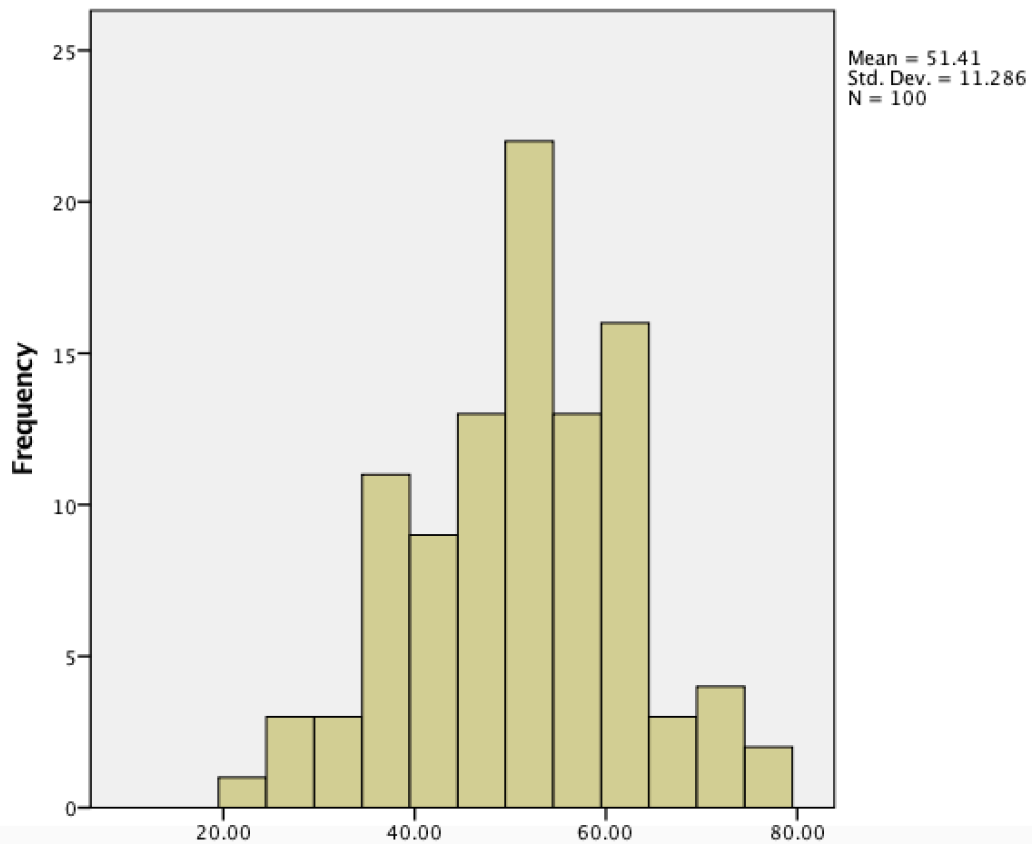
Time Spent on Math Homework...
 Math Achievement Test Score [...]

- c. Move the variable over using the arrow button to the “variable” field and hit “ok”



- d. Graph will appear in the output window

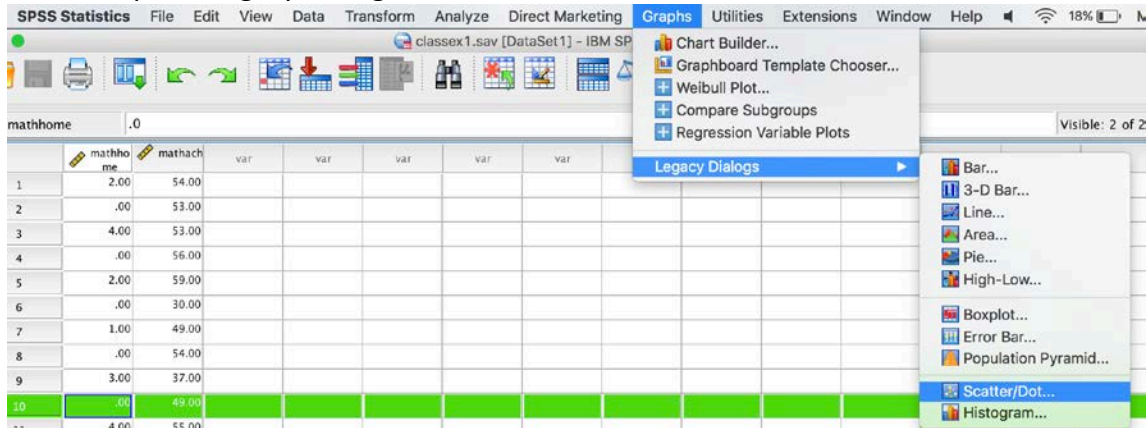
➔ **Graph**



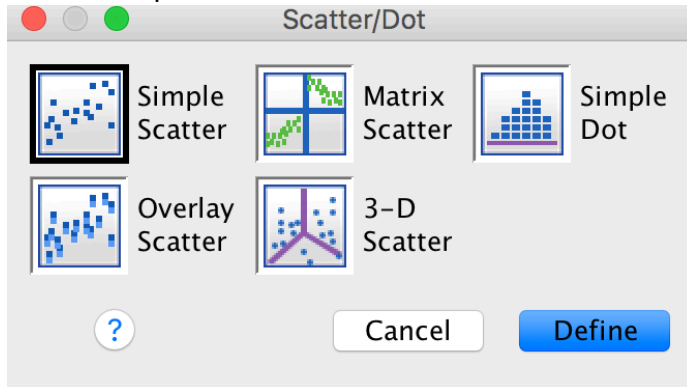
- e. Repeat for other variables as needed

4. Run scatterplot

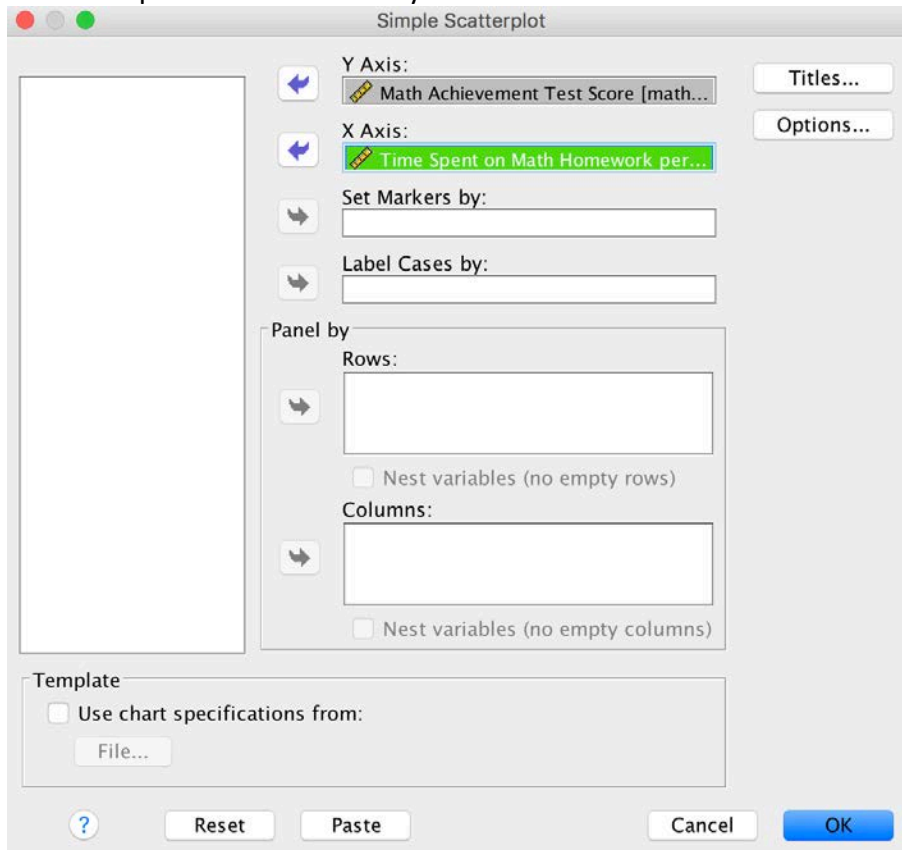
a. Go to Graphs > Legacy Dialogs > Scatter/Dot



b. Select "Simple Scatter" and hit the "Define" button

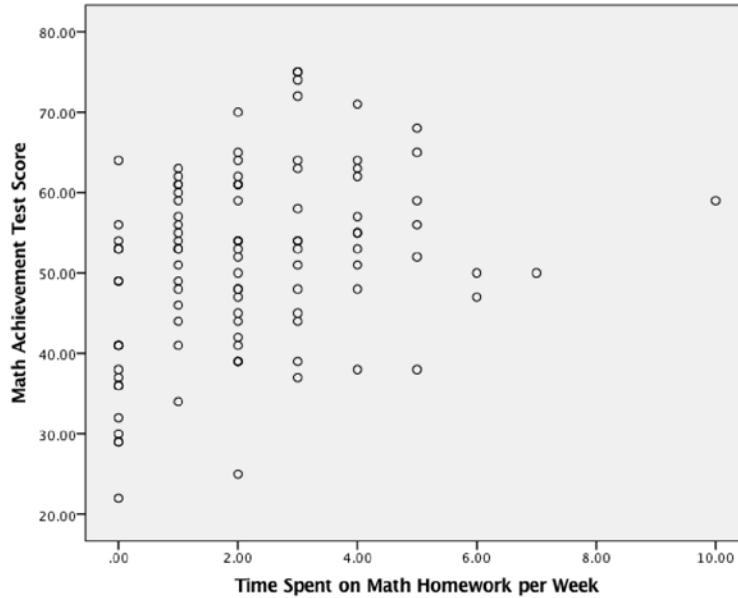


- c. Determine which variable goes on which axis. Move over using the arrow button and hit "ok"
 - i. Independent variable on x axis
 - ii. Dependent variable on y axis



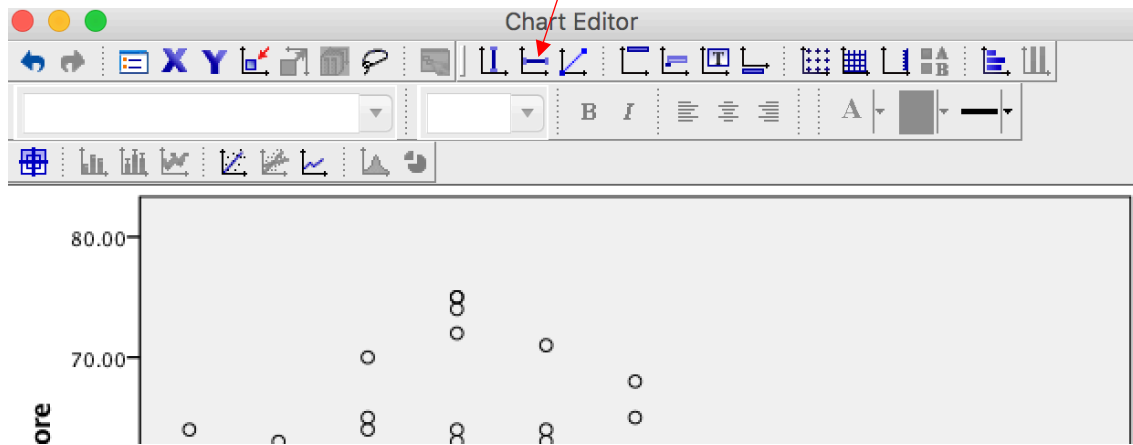
d. Look at scatterplot in the output window

➔ Graph



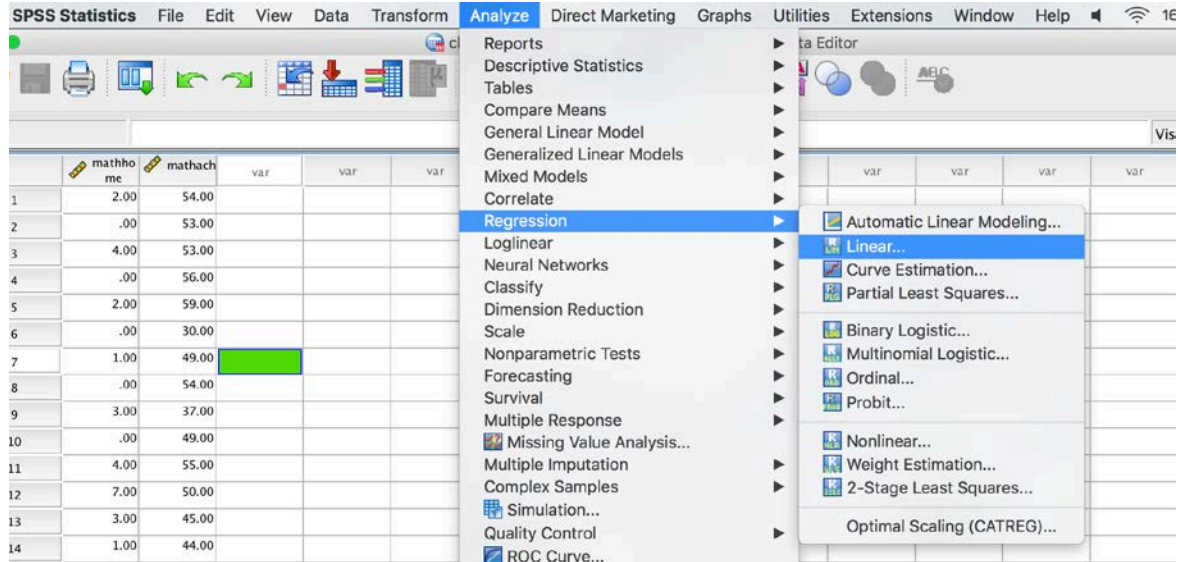
e. You can edit the scatterplot by double clicking on the graph in the output and then using the chart editor window

Use this option to add a reference line to your graph

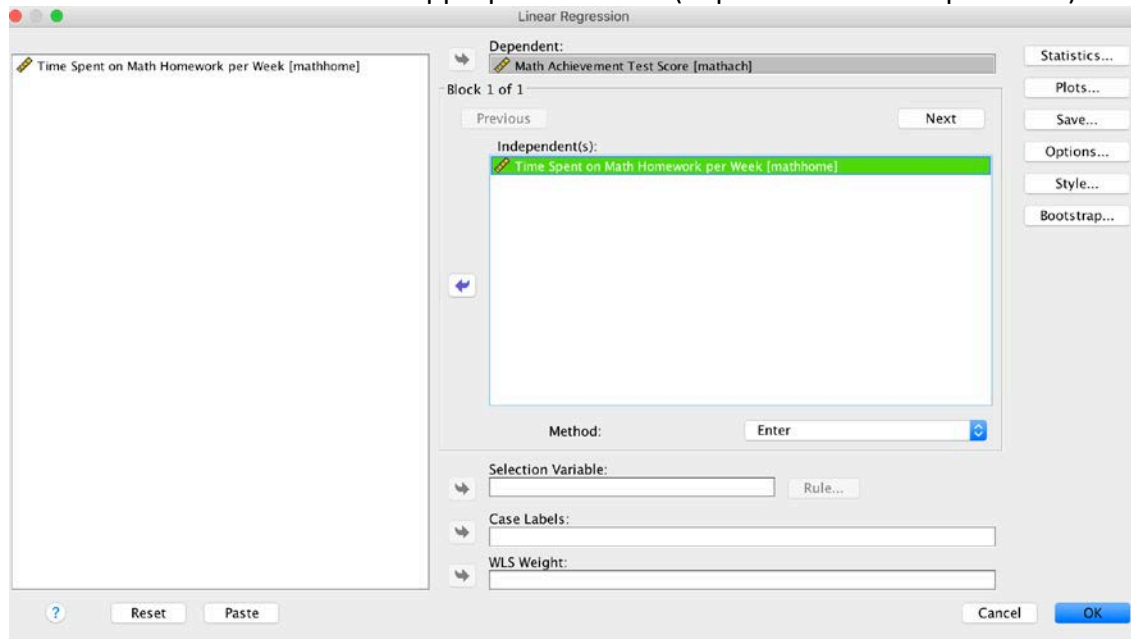


5. Run the regression

a. Go to Analyze > Regression > Linear



b. Move variables over to appropriate section (dependent and independents) and hit "ok" button



- c. Review the results in the output window
- i. This first part simply tells you what variables were actually entered into the regression. This is helpful to review in complex regressions with lots of variables – check here to make sure SPSS correctly ran the model as you entered it.

→ **Regression**

Model	Variables Entered	Variables Removed	Method
	1	Time Spent on Math Homework per Week ^b	

a. Dependent Variable: Math Achievement Test Score

b. All requested variables entered.

- ii. The second part of the output has the model summary and data

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320 ^a	.102	.093	10.74707

a. Predictors: (Constant), Time Spent on Math Homework per Week

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1291.231	1	1291.231	11.180	.001 ^b
	Residual	11318.959	98	115.500		
	Total	12610.190	99			

a. Dependent Variable: Math Achievement Test Score

b. Predictors: (Constant), Time Spent on Math Homework per Week

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	47.032	1.694		27.763	.000
	Time Spent on Math Homework per Week	1.990	.595	.320	3.344	.001

a. Dependent Variable: Math Achievement Test Score