


## 1.5 Linear Regression

Name \_\_\_\_\_

1.1  
Notes Page.

Insert a List and Spreadsheet page  
and enter the following data into the  
page.

x = 6, 4, 1, 5, 4, 4, 9, 8, 5, 2, 7, 1, 6, 3,  
2, 4  
y = 7, 6, 2, 5, 6, 4, 8, 8, 6, 3, 8, 3, 6, 4,  
1, 3,

 ① to insert the new page.

Select Lists and Spreadsheets ③

Title each column and enter the data.

x = 6, 4, 1, 5, 4, 4, 9, 8, 5, 2, 7, 1, 6, 3, 2, 4  
y = 7, 6, 2, 5, 6, 4, 8, 8, 6, 3, 8, 3, 6, 4, 1, 3

Review the Data

Insert a Data and Statistics page and make a scatter plot of the data.

 ① ⑤

Assign a value to the x-axis.

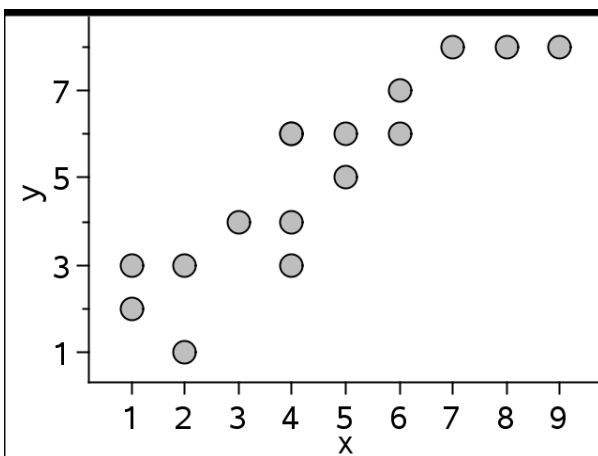
Move the cursor to the bottom of the screen “click to add variable”

Select “x”

Move the cursor to the left of the screen “click to add variable”

Select “y”

Do you see any type of correlation? \_\_\_\_\_



Look at the data on the next page.

A	age	B	cd
1	18		12
2	20		15
3	20		18
4	22		12
5	24		10
6	24		8
B	18		

Insert a data page to make a scatter plot.  
 Which variable should go on the bottom?  
 Which variable should go on the left?

Insert a Data and Statistics page to make a scatter plot.

**ctrl** **I** **5**

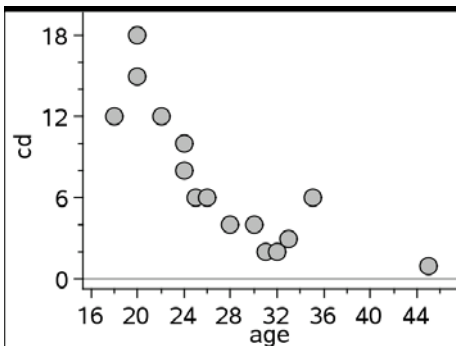
Which variable should go on the bottom? \_\_\_\_\_

Which variable should go on the left? \_\_\_\_\_

Use Linear Regression to find the least-squares line.

Menu, analyze, regression, Linear (mx + b)

**menu** **4** **6** **1**



What is the equation of the line?

Insert a calculator page and find the r value.

**ctrl** **I** **1**

<i>stat.results</i>	
"Title"	"Linear Regression (mx+b)"
"RegEqn"	"m*x+b"
"m"	-0.589241
"b"	23.4904
"r <sup>2</sup> "	0.66022
"r"	-0.812539
"Resid"	" {... } "

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Use either "Stat.r" enter or you may use menu, statistics, state results, enter.

**menu** **5** **2** enter

What does the r value tell you about the correlation? \_\_\_\_\_