

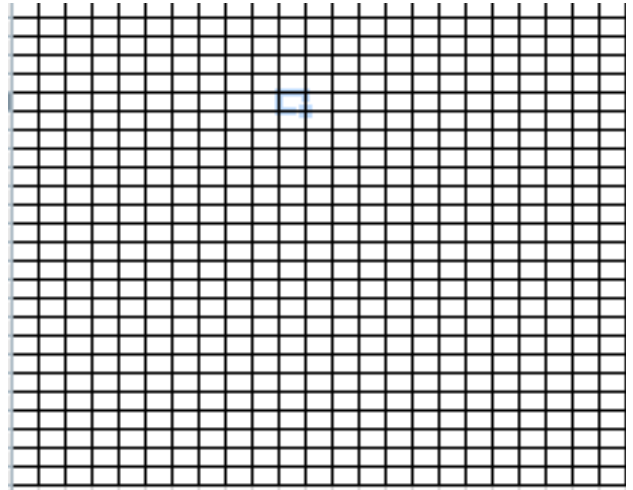
Problem A

1. Enter the data below into your list on Calc.

- *The independent variable is usually given first (x), then the dependent (y)*
- Steps: **STAT, EDIT**, (may need to clear previous data)

2. Look at a scatter plot of data on Calc. and make a rough sketch here:

- **2ND Y=** (Stat Plot) to make sure **ON** and **Scatter Plot** are chosen
- * **GRAPH**, (may need **ZOOM, ZOOMSTAT** to see data)



3. Perform linear regression (**STAT, CALC, LIN REG**) on data and write your equation here: _____

4. What is the correlation value? _____

5. Make two statements about the r-value.

- 1.
- 2.

6. Enter your equation on Calc and graph (**Y= and GRAPH**).

7. Are there any points exactly on your line? If yes, which?

Problem B

1. Make a scatter plot (on calc) of data at right showing one point for each city.

2. Use linear regression to find equation and write it here: _____

3. According to your equation, as you go one degree north, the January low temperature tends to do what?

4. a. What is your correlation value? _____

b. Does the value indicate this is a good prediction? _____

5. Graph your equation with the scatter plot. Which city deviates most from predictions?

6. The actual January mean low temp. for Acapulco, Mexico (17° latitude) deviates from the equation by +8.3°. Find Acapulco's actual January mean low temperature.

7. Predict the January mean low temperature for the North Pole. (*what is latitude?*)