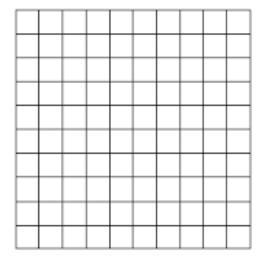
## DATA-PALOOZA

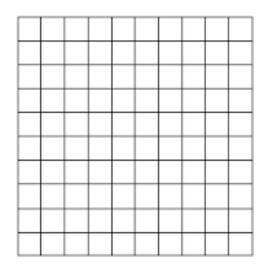
## **HISTOGRAMS**

a. The following data are the scores for the freshmen's US History Regents Scores. Fill in the table and make a FREQUENCY HISTORGRAM and a CUMULATIVE FREQUENCY HISTOGRAM Be Sure to label and title your graphs!!

{68, 83, 90, 92, 81, 80, 61, 53, 98, 42, 85, 82, 90, 93, 58, 93, 67, 81, 89, 93, 55,}

Grade	Tally	Freq.	Cum. Fq.
40-49			
50-59			
60-69			
70-79			
80-89			
90-100			





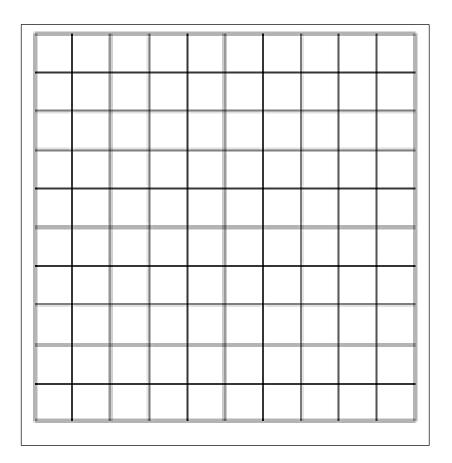
b. Which 9 point interval has the highest frequency?

c. Which graph do you think is a clearer representation of how the students did on the regents?

## **Scatterplots**

a. The following data shows the lengths (inches) and weights (pounds) of newborn babies. Create a SCATTERPLOT of the data. Use a BREAK IN SCALE on the X and the Y Axis.

Length	Weight		
21	8.5		
18.5	7.8		
20	7.5		
22	8.5		
19	7.5		
21	8.2		
20	9.0		
22.5	8.9		
19.5	8.0		
16.5	5.2		
18	6.9		
15	5.3		
24	9.3		
23	9.1		



b. Use your calculator to run a linear regression. Draw in your line of best fit on the graph.

Equation of Regression:

Correlation coefficient r=\_\_\_\_\_

- c. What does the r-value say about your data?
- d. Use your regression equation to determine the approximate weight of a baby that is 20 inches long.
- e. Use your regression equation to determine the approximate length of a baby that is 7 lbs.

Box	and	Whis	ker	Plot

The following data are the number of runs scored by the Varsity Baseball team last season:

{0, 8, 5, 3, 11, 7, 9, 4, 2, 1, 7, 0, 5, 8, 12, 3, 1, 4, 7, 3, 0, 5}

a. Use your calculator to find the five number summary for the varsity data and list them below:

The 5NS for the JV team is listed below:

Min: 0 Q1= 2 Med = 4 Q3 = 5 and Max = 8

b. Create a comparison box and whisker plot on the same axis. Be sure to put a constant scale on the number line, label each box and whisker for the appropriate team and title your graph.

c. What does your graph tell you about the Varsity and the JV teams?

d. What is the IQR for the Varsity team? \_\_\_\_\_

- e. In what percent of the games did the JV team score less than 4 runs?
- f. In what percent of the games did the JV team score more than 5 runs?\_\_\_\_\_

MCT
The following data is the number of minutes students spend each night doing homework:
{30, 15, 45, 60, 90, 45, 60, 30, 40, 20, 60, 20, 15, 45, 20, 180, 50, 60, 45, 20, 30}
a. Find the MCT for the data set.
b. Which MCT value do you think best represents the data? Explain why.
c. If everyone was given an extra 15 minute survey to do for HW one night (the data is shifted) what would the new MCT be?
d. Describe one type of graph you could make from this data. Why would you make that type of graph?