

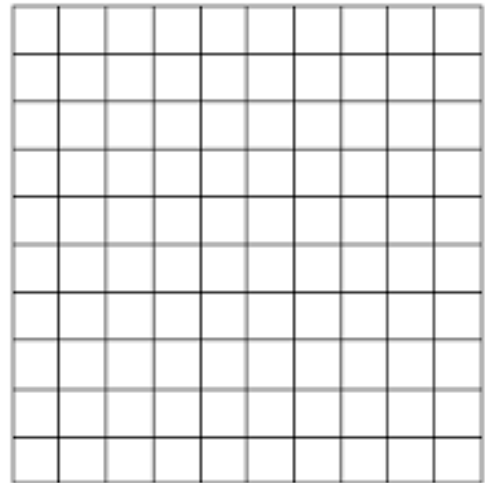
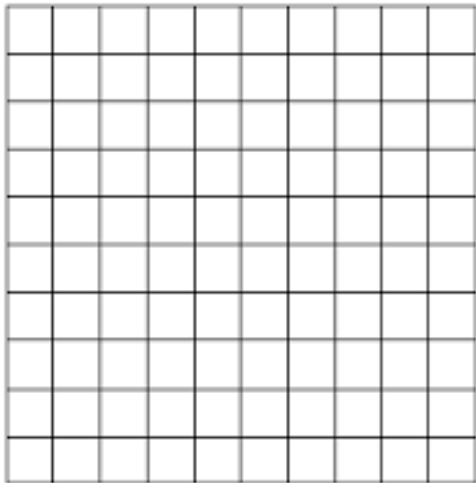
DATA-PALOOZA

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 HISTORGRAM. 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			

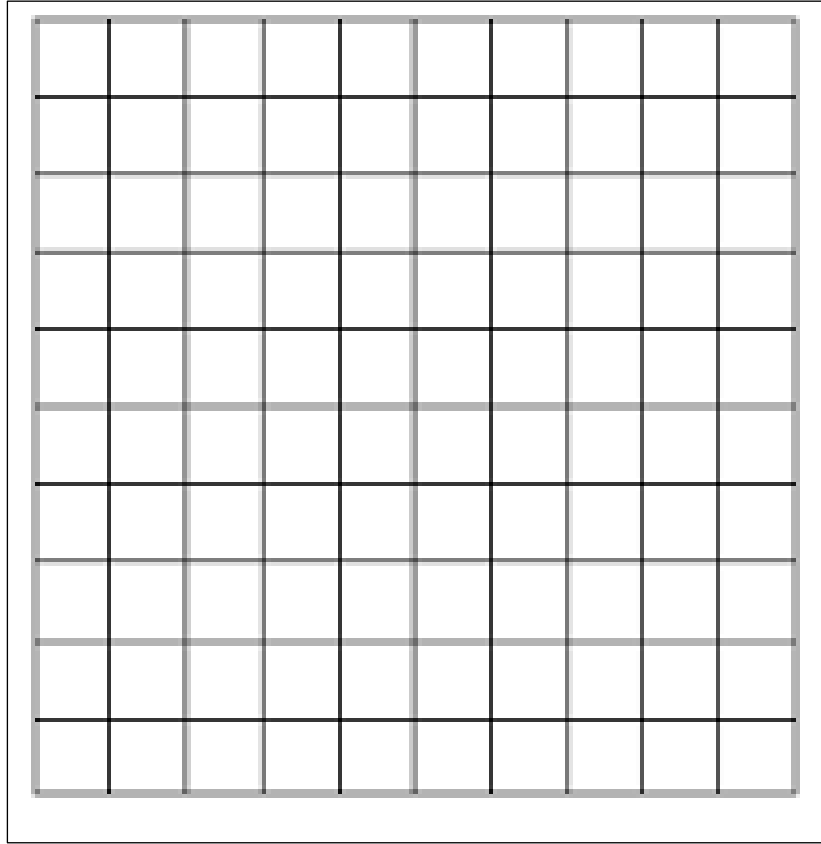


- b. Which 9 point interval has the highest frequency?
- c. Which graph do you think is a clearer representation of how the students did on the regents?

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 Whisker 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? _____

