Algebra Name:_____

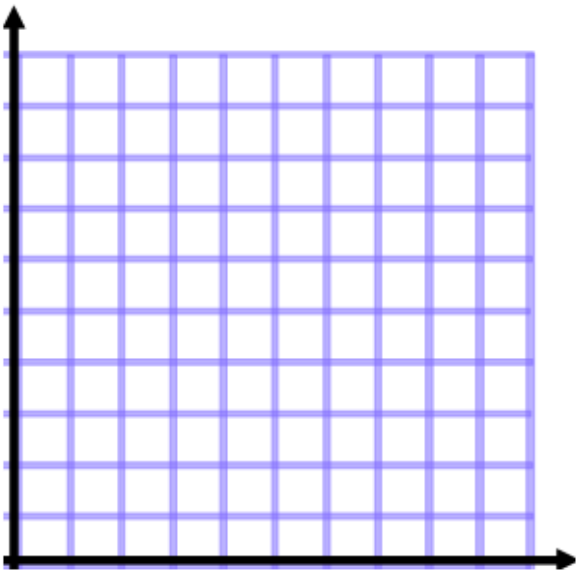
10.1 HW Date:_____

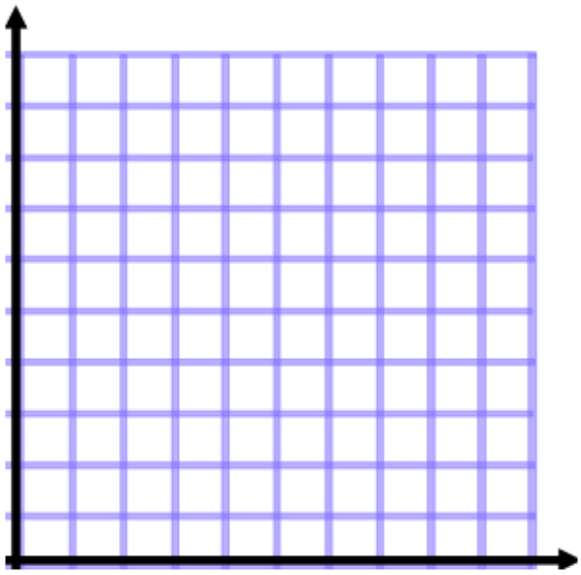
1. The following data set is a list of the number of students in 20 classes at the iSchool. Make a table of the data including a tally column, a frequency column and a cumulative frequency column.

18, 21, 28, 7, 12, 3, 20, 16, 18, 21, 24, 25, 16, 11, 13, 15, 17, 11, 8, 18

Age Range	Tally	Frequency	Cumulative Freq.
0-5			
6-10			
11-15			
16-20			
21-25			
26-30			

Make a histogram of the data above and a cumulative frequency histogram.



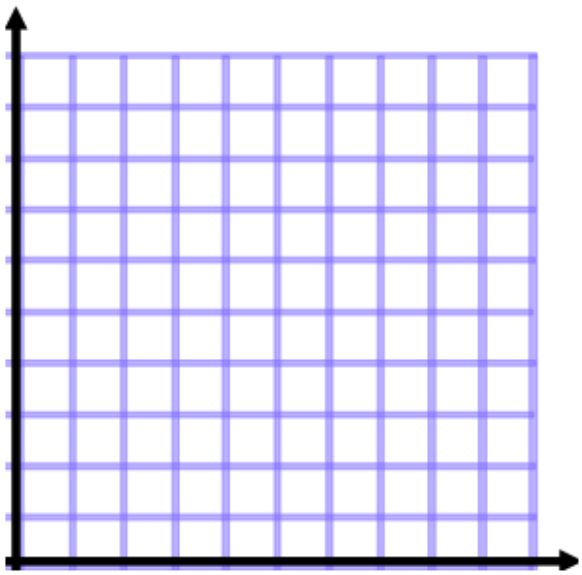


2. The following number represent the regents scores for 15 algebra students. Find the 5 number summary for the data and construct a box and whisker plot:

{68, 73, 75, 79, 80, 80, 81, 82, 83, 85, 88, 89, 91, 92, 96}

3. Make a scatterplot of the following data use a break in scale!:

Cost of Cheeseburger	Calories in burger
$3.00	720
$1.00	1120
$2.50	650
$5.00	525
$12.00	550
$6.00	835
$2.50	950
$10.00	490



a. Draw a line of best fit.
b. What type of correlation do you see?

c. If a burger costs $8, how many calories will it have?

4. The data set belwow are the times it took a group of kids to run a mile in minutes.

Find the 4 MCTs of the following data set:

{8.5, 7.0, 8.0, 9.5, 7.5, 16.0, 9.0, 9.5, 8.5, 7.5, 8.0, 9.0, 8.5, 7.5}

Which of the MCT is the best representation of the data set?

5. A data set has mean = X and range = Y. If the data set incurs a shift of minus 10, what will the new mean and ranges be?