Accel Algebra
Statistics Test REVIEW!

Name _____

Period _____ Date _____

Questions 1-15 use the data in the table below, which shows the temperatures of 10 U.S. cities on January 1 and July 1, 2008:

City	Temperature January 1 (°F)	Temperature July 1 (°F)
Anchorage, AK	16	58
Atlanta, GA	43	80
Boston, MA	29	73
Charleston, SC	48	82
Chicago, IL	22	73
Denver, CO	29	73
Honolulu, HI	73	81
Las Vegas, NV	48	91
New York, NY	32	76
San Francisco, CA	50	63

1. Find the mean, median, and mode of the temperatures on January 1.

mean: _____ median: _____ mode: _____

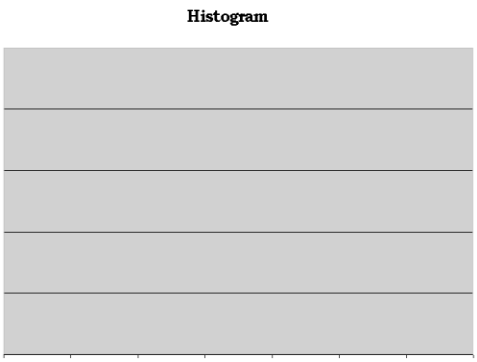
2. Find the mean average deviation of the temperatures on January 1.

MAD: _____

3. Make a grouped frequency table of the temperatures on January 1. Use 5 groups.

Range	Frequency

4. Use your table from **#3** to create a histogram of the temperatures on January 1.



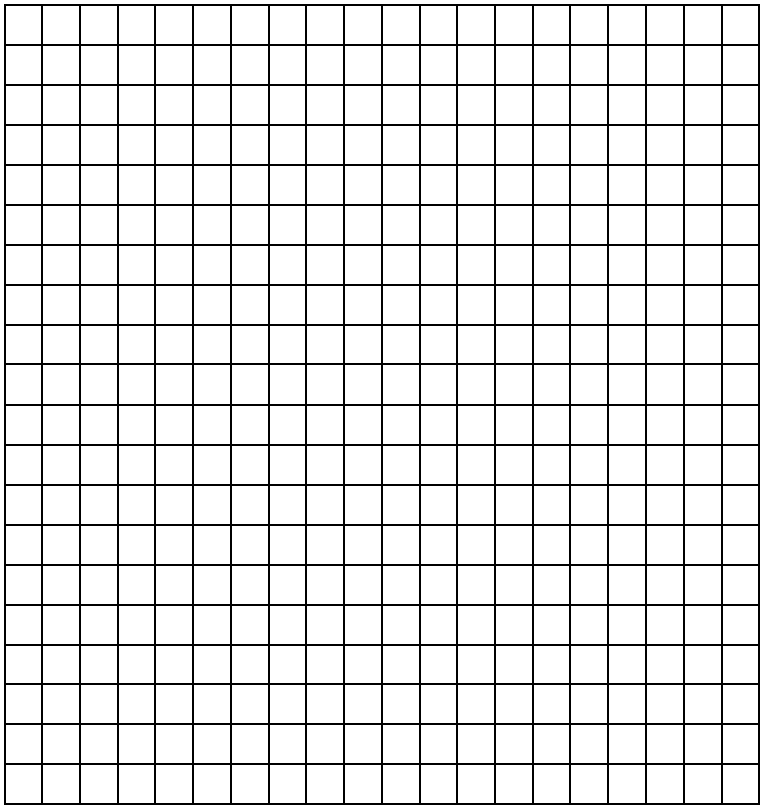
5. Is the January data symmetric, skewed left, or skewed right? Explain.

6. Find Q_0, Q_1, Q_2, Q_3, and Q_4 for the January temperatures.

_____	_____	_____	_____	_____
Q_0	Q_1	Q_2	Q_3	Q_4

7. Create a box plot for the January temperatures.

8. Create a scatterplot with January temperatures on the *x*-axis and July temperatures on the *y*-axis.



11. Is the correlation between January and July temperatures positive, negative, or approximately zero? Explain why this makes sense based on the context.

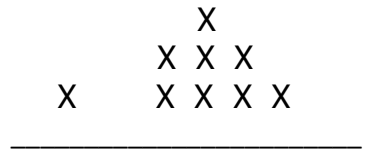
12. Draw an estimated regression line onto your graph.

13. Find the equation of your regression line.

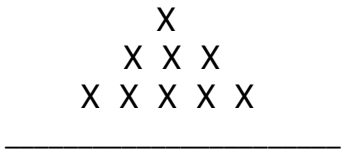
14. Use your regression line's equation to predict the July temperature in a city where the January temperature is 60° F.

15. Use your regression line's equation to predict the *January* temperature in a city where the *July* temperature is 85° F.

16.



Data set A



Data Set B

Which data set appears to have a smaller mean?

Which data set appears to have a smaller median?

Which data set appears to have a larger range?

17. For the data set **2, 5, 10, 12, 14** find

	Mean	**Median**	**Lower Quartile**	**Upper quartile**	**Range**	**IQR**
For the given data set						
Add 13 to the data set						
Add 1 to every element in the data set						
Multiply every element in the data set by 2						

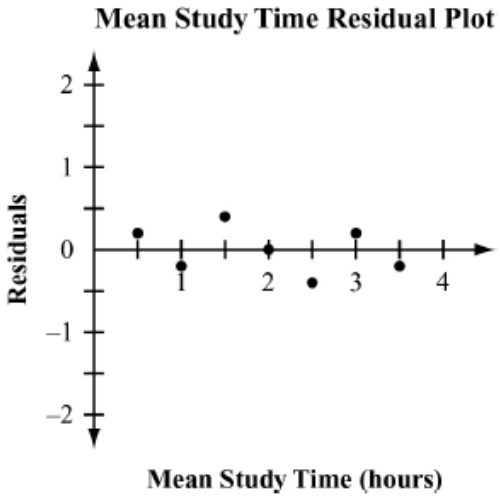
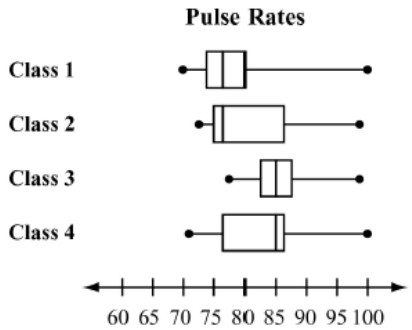
18. Complete the two-way frequency table for 9th grader's school transportation survey:

	boy	**girl**	**Total**
walk		46	
car	28		45
bus		12	27
bike		17	69
Total	129	92	

What percentage of 9th grade girls walk to school?

What percentage of 9th graders are boys who ride bike to school?

19. Consider the residual plot. Is the best fitting line a good predictor of the linear model of test scores depend on study time?



20. A science teacher recorded the pulse rates for each of the students in her class after the students had climbed a set of stairs. She displayed the results, by class, using the box plots shown. Which class had the highest pulse rates after climbing the stairs? Explain.