

Algebra 1 Fall 1998 Final Examination

Answer the following questions in a separate space. Make sure you show all work and give full and complete responses, using the numbering system I have established for the problems. There is a 90-minute time limit on this examination. Use your calculator and the computer as you need. **Do Not** write on this Examination!

1. On this examination use Word, Excel, Graphical Analysis, Graph Link, or Pmail at least once in your solution to a problem. Report as the answer to this question what problem(s) were involved and what technologies were used.
2. Write the equation of the line that moves through the point $(-6,2)$ and has a slope of 2.
3. Measure the height of this room in centimeters.
4. Zer made the following scores on her Portfolios this semester. Give her grades for each 9 weeks and what she needs to make on this Final Examination to get a “B” in Algebra?

Item	1 st 9weeks	2 nd 9weeks
OverArching	3	3
7 Parts of Alg	2	4
Testing	1	3
Technology	3	2
Growth	4	3
Free	0	3
Journal	3	4
		1day late

5. Get the two lists L_{XS} , and L_{YS} (or L_1 and L_2), and your assigned number from Mr. Young and. Report your number as the answer to this question.
6. Answer the following for the list L_{XS} :
 - a) identify the values listed in the table below

n	Min	max	median	mode	mean	Average
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- b) make a Histogram or a Box and Whiskers graph
- c) calculate the percent error on the mean if it should be 3888.5

7. Using both list from question 5, answer the following:
- produce a Scatter Plot of the data, using L_{XS} as the x-values
 - state the pattern you see in this data set
 - produce a model (regression equation) that fits this data
 - give a graph of this equation with the Scatter plot
 - use this model to predict the value of y, if x is given as 77 777
8. Give the slope and y-intercept of the following equations:
- $y = 2x - 4$
 - $2y = 5x + 3$
 - $y - 5 = -3(3x - 5)$
9. Solve the following. Use two of the four methods (**Old Way, Graph, Table, and Solver**). Use only one method per problem and state the method you are using.
- $8 - 9T = 21T - 17$
 - $-2(x - 5) = -x$
 - $9(b - 4) = 5(3b - 2)$
10. Using the rule
- $$y = \frac{1}{3}x - 22$$
- create a table of 7 values pairs for x and y
 - graph these values
 - put the values from the table into lists on your calculator