

Examination One – 3rd Nine-Weeks

Algebra 1

Answer these questions on your own paper. Make sure you show your work and that you ATQ (Answer The Question).

1. Sometime during this examination, use Graphical Analysis, GraphLink, and/or Pmail. Explain when and where you used it.
2. You see an advertisement for instructions on how to tie flies for fly-fishing. The cost of materials for each fly is 15 cents. You plan to sell each fly for 58 cents, and you want to make a profit of at least \$200. How many flies will you need to tie and sell?
3. Compare and Contrast an Equation and an Inequality.
4. Given the following scores on her Portfolio, what will Oook need to make on her Algebra final to make a C?

Item	1 st 9weeks	2 nd 9weeks
Overarching Process	2	4
7 Systemic Parts of Algebra	2	4
Your Ability to Test	3	4
Working with Technology	1	3
Growth	3	3
Free Choice	0	2
Journal	3	4
days late		3 days

5. Use two of the 4 methods (Algebra, Guess, Table, and Shade) to solve the following. Use only one method on each problem. Document the use of the selected method and state the method used.

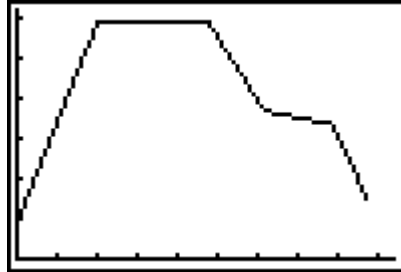
a) $3x + 2 \leq 8$

b) $\frac{1}{4}x + 2 > 1$

c) $4(z + 7) < 3(z - 6)$

d) $-3b - 4 < -\frac{1}{2}(6b + 2)$

6. Explain how you get to the Algebra web page. Be specific.
7. Execute the program you selected for the Algebra On My TI investigation. Show me how it works.
8. Explain what was going on in the situation that led to this graph in the Trip to Tulsa investigation.



9. Given the following set of data for the cost of a year of college, answer these questions:

Year	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Cost \$	4205	4460	4680	4960	5510	6060	6845	7600	8435	9000	9659

- a) What are the mean, median and mode for the Cost?
 - b) Make a Histogram of the Cost.
 - c) Make a Scatter Plot of the Year vs. the Cost.
 - d) Make a Linear Model of this relationship, using Bubble Boy.
Identify the Slope and the Y-Intercept, with units.
 - e) Identify the Model that it “really” is and do a Regression Equation.
Show the graph with both models.
 - f) Use both models (d and e) to predict the Cost in 1999 and 2000.
10. Given the following rule, complete the table.

$$2x + y = 6$$

x	y
0	
3	
-11	
(1/2)	
	5
Δ	
$3x-5$	