Name: _____ Algebra
Date: _____ Review
Class: _____ Graded Homework 11

Show all of your work for every problem. The numbers in the brackets are the points that each problem is worth. Multiple Choice Problems are worth 3.
NO WORK = ZERO CREDIT

1) [3] Could the following relation be a function?

x	5	7	9	-2	10	0
y	7	7	7	7	7	7

2) [3] If (x, -5) is a point on the line represented by the equation $10x - 6y = 40$ determine what value x would need to have.

3) [4] Evaluate when a = -6 and b = 3: $\frac{10a-6b+(ab)^2}{ab-b^2-6a}$

4) [4] Graph both equations and state the point of intersection if it exists:

$7x + 4y = -34$ and $6y - 8x = -14$

5) [3] An expression of the fifth degree is written with a leading coefficient of seven and a constant of six. Which expression is correctly written for these conditions?

(1) $6x^5 + x^4 + 7$

(2) $7x^6 - 6x^4 + 5$

(3) $6x^7 - x^5 + 5$

(4) $7x^5 + 2x^2 + 6$

6) [3] The expression $3(x^2 - 1) - (x^2 - 7x + 10)$ is equivalent to

(1) $2x^2 - 7x + 7$

(2) $2x^2 + 7x - 13$

(3) $2x^2 - 7x + 9$

(4) $2x^2 + 7x - 11$

7) [3] What is the largest integer, x, for which the value of $f(x) = 5x^4 + 30x^2 + 9$ will be greater than the value of $g(x) = 3^x$?

(1) 7

(2) 8

(3) 9

(4) 10

8) [3]

During a recent snowstorm in Red Hook, NY, Jaime noted that there were 4 inches of snow on the ground at 3:00 p.m., and there were 6 inches of snow on the ground at 7:00 p.m.

If she were to graph these data, what does the slope of the line connecting these two points represent in the context of this problem?