Intermediate Algebra (B)	Name						
Unit 5 Part 1 Review		Class period	1	2	3	4	5

Problems 1-4: Solve the equation by Graphing. Show the Graph AND the Solution(s). Round to the nearest hundredth when necessary.

1. 
$$f(x) = x^2 + 8x + 7$$
, where  $f(x) = 0$ 





 $h(x) = x^2 - 8x + 10$ , where h(x) = -6

Solution(s):



3.  $x^2 - 4x = -8$ 



Solution(s): \_\_\_\_\_

4.  $2x^2 - 4x - 3 = 0$ 

2.



Solution(s): \_\_\_\_\_

Problem 5: Graph the inequality. Show a table of values.



**Problem 6: Solve the inequality by graphing. Show the Graph AND the Solution(s). Round to the nearest hundredth when necessary.** 



## Problems 5 – 10: Solve by Factoring. Show the Factors AND the Solution(s). 7. $x^2 + 10x - 24 = 0$ 8. $4x^2 + 11x - 3 = 0$

Factors:\_\_\_\_\_

Solution(s):\_\_\_\_\_

Factors:\_\_\_\_\_

Solution(s):\_\_\_\_\_

11.  $6x^2 + 19x = 25$ 

9.  $4x^2 - 25 = 0$ 

Solution(s):\_\_\_\_\_

Factors:

**10.**  $x^2 + 6x + 18 = 9$ 

Factors:\_\_\_\_\_

Solution(s):\_\_\_\_\_

12.  $6x^2 + 12x = 0$ 

Factors:

Solution(s):

Factors:\_\_\_\_\_

Solution(s):\_\_\_\_\_

**13.** A rock is thrown upward from the top of a building. The height of the rock can be calculated using the function  $h(t) = -16t^2 + v_0 \cdot t + h_0$  where:  $v_0$  = initial velocity,  $h_0$  = initial height, h(t) represents the height of the rock, and *t* represents seconds since the rock was thrown. The building has an initial height of 64 feet and the rock was thrown with an initial velocity of 128 feet per second.



**e.**) When will the rock hit the ground?