## Assignment #1-5

**Precalculus Book:** 

Pg. 58 – 61 3, 7, 9, 14, 19, 25, 31, 37, 40, 46, 61, 77, 84

## **Review Problems:**

- 1. Given the functions:  $f(x) = \sqrt{x-4}$   $g(x) = x^2 3$  h(x) = 2x 5find the following. Be sure to simply where possible. a.  $(g \circ h)(x)$  b.  $(f \circ h)(6)$  c. f(x) + h(x)
  - d. g(2)-h(-1) e. Domain of f(x) f. Domain of  $(g \circ f)(x)$
- 2. Write an equation of a line passing through the points (-1, -3) (4, 7).
- 3. Graph the function  $f(x) = 3^{x-1}$  by filling in the table and plotting the points.

x	-2	-1	0	1	2	3	4
f(x)							

4. Multiply f(x) = x - 5 and g(x) = 3x + 1 to produce h(x). Complete the table of values and then graph each function.

	-	-	
x	f(x) = x - 5	g(x) = 3x + 1	$h(x) = f(x) \cdot g(x)$
-3			
-2			
-1			
0			
1			
2			
3			

			↑v				
			60				
			50+				
			30 T				
			40				
			10				
			20				
			20				
			10-				
							x
4	2	2 1		í	2	2	4
-4	-3 -	-2 -1	1	i	2	3	4
-4	-3 -	-2 -1	1	i	2	3	4
-4	-3 -	-2	1	1	2	3	4
-4	-3 -	2 –	1-10-	1	2	3	4
-4	-3 -	2 –	1	1	2	3	4
-4	-3 -	-2 -1		1	2	3	4
-4	-3 -	2 -1	-10	í	2	3	4
	-3 -	2 -1		1	2	3	4
-4	-3 -	2 -1			2	3	4
-4	-3 -	2 -1		1	2	3	4
-4	-3 -	2			2	3	4
-4	_3 _	2			2	3	4
-4	_3 _	2 _	-20		2	3	4
-4	-3 -	2			2	3	4
-4	_3 _	2	-20		2	3	4
-4	_3 _	2	-20		2	3	4
-4	_3 _	2	-20		2	3	4
	_3 _	2	-20		2	3	4
	_3 _	.2 _1	-20		2	3	4
	_3 _	2			2	3	4
	-3	.2	-20		2	3	
		2 –			2	3	
					2	3	
		2			2	3	