

**Functions and Inequalities**

**NAME:** \_\_\_\_\_

**TOPIC C: Function Notation**

**DATE:** \_\_\_\_\_

1. Evaluate the following expressions given the functions below:

$$g(x) = -3x + 1$$

$$f(x) = x^2 + 7$$

$$h(x) = \frac{12}{x}$$

$$j(x) = 2x + 9$$

a.  $g(10) =$

b.  $f(3) =$

c.  $h(-2) =$

d.  $j(7) =$

e.  $h(a) =$

f.  $g(b+c) =$

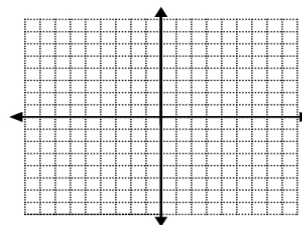
h. Find  $x$  if  $g(x) = 16$

i. Find  $x$  if  $h(x) = -2$

j. Find  $x$  if  $f(x) = 23$

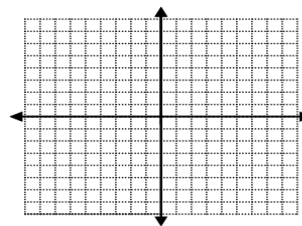
2. Given  $f(x) = 3 - 4x$ . Fill in the table and then sketch a graph.

x	f(x)
-6	
-3	
0	
1	
	-5



3. Given  $f(x) = \sqrt{x+1}$ . Fill in the table and then sketch a graph.

x	f(x)
3	
0	
-10	
2	
	6



4. Translate the following statements into coordinate points, then plot them!

a.  $f(-1) = 1$

b.  $f(2) = 7$

c.  $f(1) = -1$

d.  $f(3) = 0$

