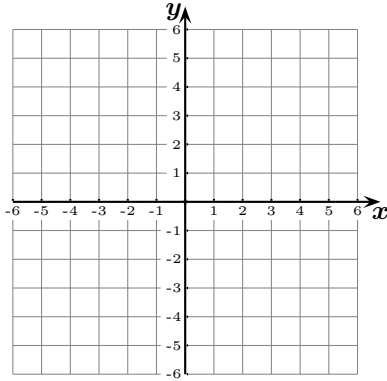


MATH 30 - Precalculus. Worksheet 1. Professor Luis Fernández

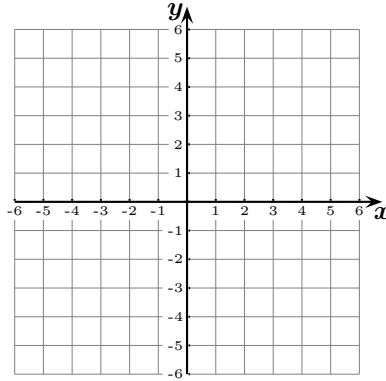
Write your answers in other sheets and **STAPLE** this one to your other sheets.

1. Sketch the graph of a function f that has the given values. Assume that the graph is continuous and smooth.

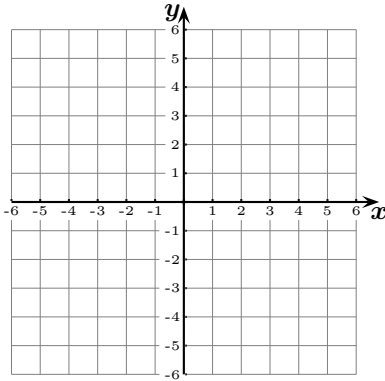
a) $f(-4) = 3, f(-3) = 4, f(-2) = 6,$
 $f(-1) = 2, f(0) = 0, f(1) = 1,$
 $f(2) = 0, f(3) = -2, f(4) = -5$



b) $f(-5) = 0, f(-3) = -3, f(-2) = -5,$
 $f(-1) = -3, f(0) = -1, f(1) = 0,$
 $f(2) = 3, f(3) = 5, f(4) = 3$

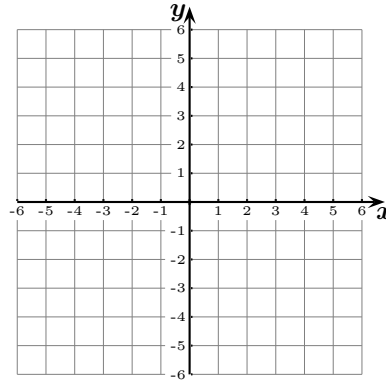


c)



x	$f(x)$
-5	4
-4	4
-3	2
-2	0
-1	1
0	0
1	-2
2	-6
3	-4
4	-1
5	1

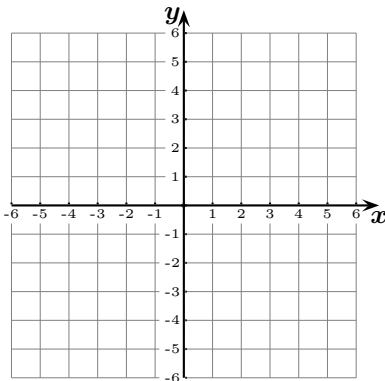
d)



x	$f(x)$
-5	-3
-4	-1.5
-3	0
-2	1
-1	0
0	-1
1	-2
2	0
3	3
4	5
5	2

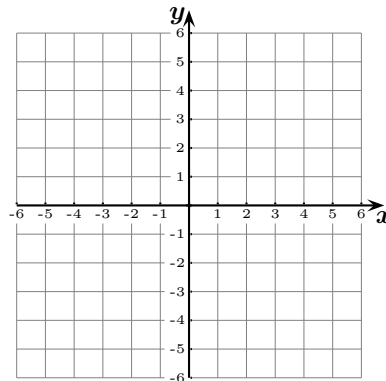
2. Complete the table of values and graph the indicated function.

a) $f(x) = x^2 - 3.$



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

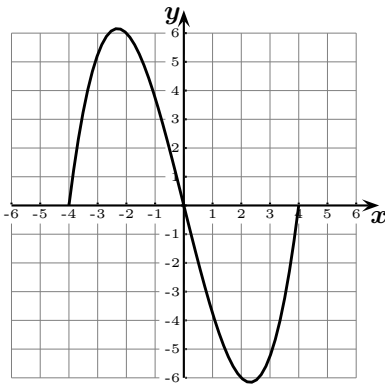
b) Graph $f(x) = 2x + 1.$



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

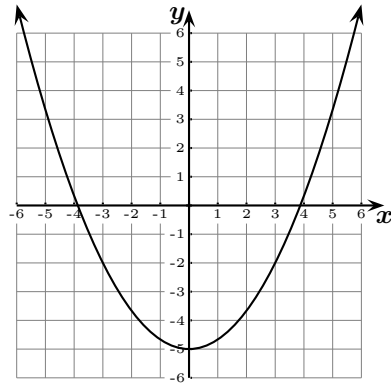
3. Complete the table of values (approximately) using the information given by the graph of f .

a)



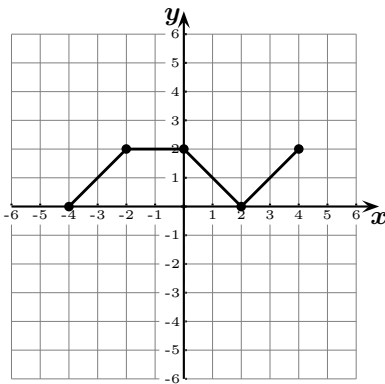
x	$f(x)$
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	

b)



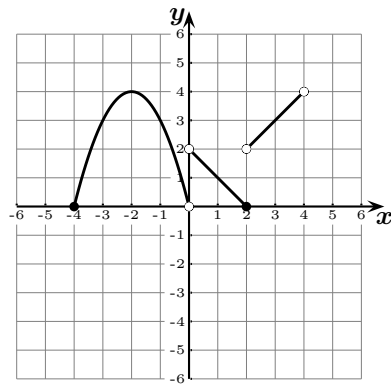
x	$f(x)$
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	

c)



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

d)



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

4. For each of the two graphs below, given the information on the graph of the function f , find ALL the values of x (approximately) for which

a) $f(x) = -4$

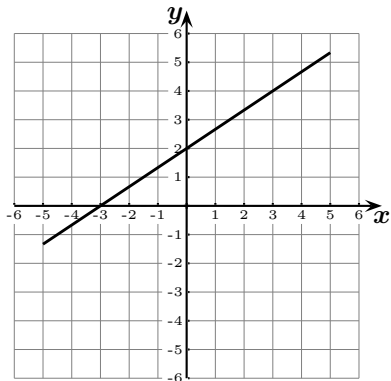
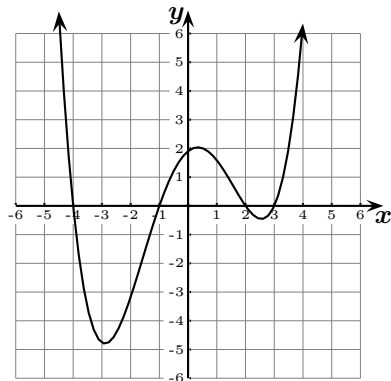
b) $f(x) = -1$

c) $f(x) = 0$

d) $f(x) = 1$

e) $f(x) = 2$

f) $f(x) = -5$



5. Find the domain, the range, the x -intercepts, and the y -intercept for the graphs in exercises 3 and 4 above.