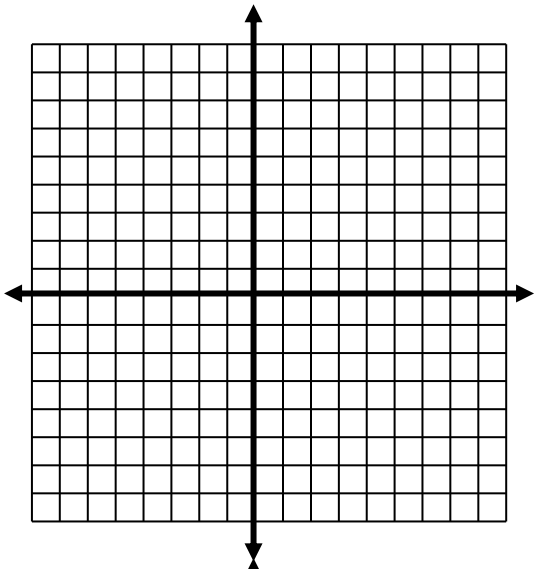
Chapter 12.7a Homework **HW**

Complete the table /graph then identify vertex, axis of symmetry, y-int,& zeroes.

1) $f(x) = x^2$

"Parent Graph"

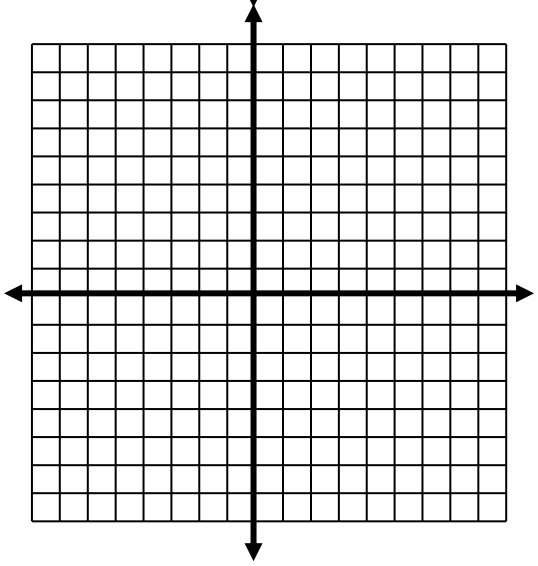
x	$f(x)$
-2	
-1	
0	
1	
2	



2) $f(x) = x^2 + 3$

Observation:

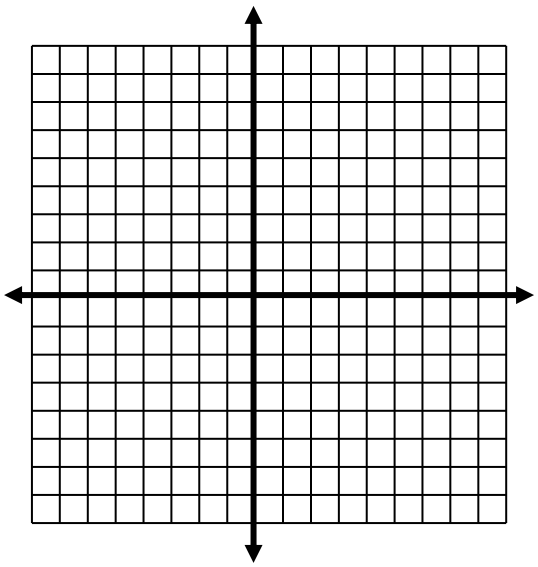
x	$f(x)$
-2	
-1	
0	
1	
2	



3) $f(x) = x^2 - 5$

Observation:

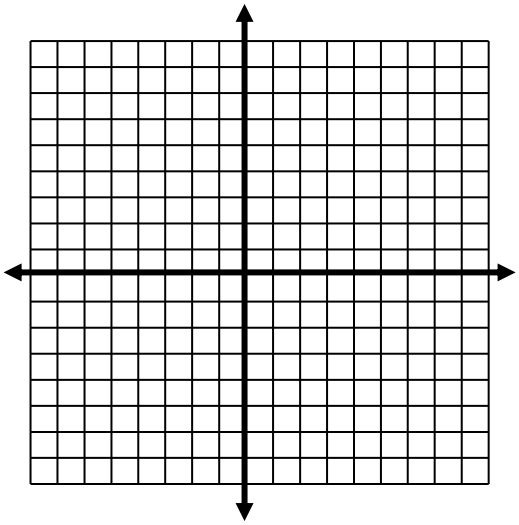
x	$f(x)$
-2	
-1	
0	
1	
2	



4) $f(x) = (x+4)^2$

Observation:

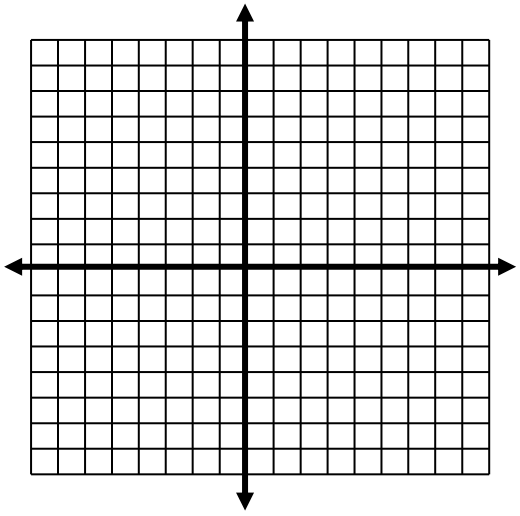
x	$f(x)$
-6	
-5	
-4	
-3	
-2	



5) $f(x) = (x-1)^2$

Observation:

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



4) Factor completely & determine the Zeroes of each function in factored form.

a) $f(x) = (x-10)(x+7)$

b) $f(x) = (6x-36)(x-4)$

c) $f(x) = (5-x)(x+2)$

5) Put the quadratic in standard form. Then find a/b/c, open up/down, & y-int.

$$f(x) = 11x + 7 - 2x^2$$

6) Find the vertex (x,y) using the vertex formula $x = -\frac{b}{2a}$

$$f(x) = x^2 + 2x + 3$$