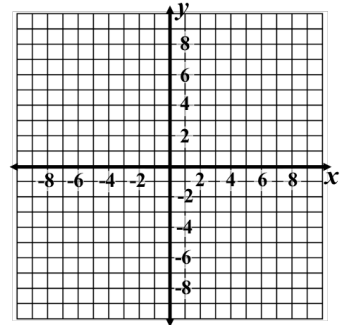


Name: _____

Using Points to Graph a Quadratic

1. $g(x) = -x^2 - 8x - 7$

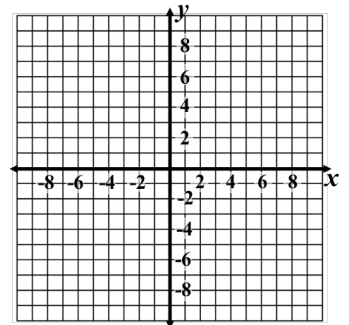
x	y
-8	
-7	
-4	
-1	
0	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Standard form: $f(x) = \boxed{a}x^2 \boxed{+b}x \boxed{+c}$ $g(x) = \boxed{-1}x^2 \boxed{-8}x \boxed{-7}$	$c = \underline{\hspace{2cm}}$	<i>opp sign of b</i> = ____ $2(a) = \underline{\hspace{2cm}}$	X

2. $h(x) = (x - 1)^2 - 9$

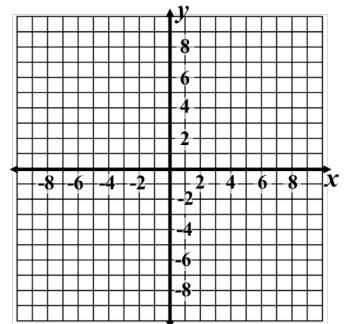
x	y
-2	
0	
1	
2	
4	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Vertex form: $f(x) = \boxed{a}(x \boxed{-h})^2 \boxed{+k}$ $h(x) = \boxed{1}(x \boxed{-1})^2 \boxed{-9}$	X	<i>opp sign of h</i> = ____	X

3. $j(x) = 2(x + 5)(x + 1)$

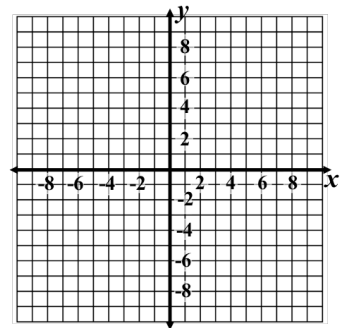
x	y
-6	
-5	
-3	
-1	
0	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Factored form: $f(x) = \boxed{a}(x \boxed{-r_1})(x \boxed{-r_2})$ $k(x) = \boxed{2}(x \boxed{+5})(x \boxed{+1})$	X	X	<i>opp sign of r1</i> = ____ <i>opp sign of r2</i> = ____

4. $k(x) = -2(x + 1)^2$

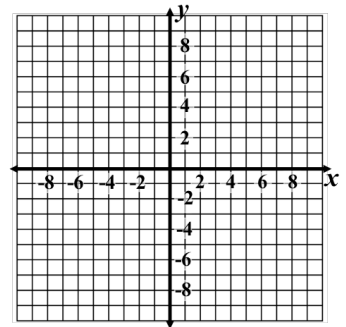
x	y
-3	
-2	
-1	
0	
1	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Vertex form: $f(x) = \boxed{a}(x - \boxed{h})^2 \boxed{+k}$ $k(x) = \boxed{-2}(x + \boxed{1})^2 \boxed{+0}$	X	<i>opp sign of h</i> = $\underline{\hspace{2cm}}$	X

5. $m(x) = -3(x - 1)(x - 3)$

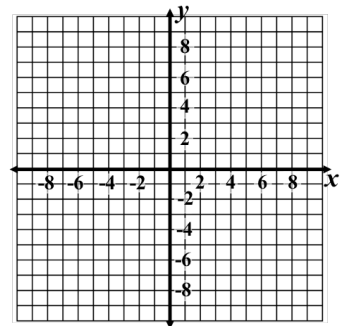
x	y
0	
1	
2	
3	
4	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Factored form: $f(x) = \boxed{a}(x - \boxed{r_1})(x - \boxed{r_2})$ $m(x) = \boxed{-3}(x - \boxed{1})(x - \boxed{3})$	X	X	<i>opp sign of r₁</i> = $\underline{\hspace{2cm}}$ <i>opp sign of r₂</i> = $\underline{\hspace{2cm}}$

6. $n(x) = 3x^2 - 6x$

x	y
-1	
0	
1	
2	
3	



Quadratic Details	What is the y-intercept? (,)	What is the x-value of the vertex? $x = \underline{\hspace{2cm}}$	What is/are the x-values of the x-intercept(s)? $x = \underline{\hspace{1cm}}$ & $x = \underline{\hspace{1cm}}$
Standard form: $f(x) = \boxed{a}x^2 \boxed{+b}x \boxed{+c}$ $n(x) = \boxed{3}x^2 \boxed{-6}x \boxed{+0}$	$c = \underline{\hspace{2cm}}$	<i>opp sign of b</i> = $\underline{\hspace{2cm}}$ $2(a) = \underline{\hspace{2cm}}$	X