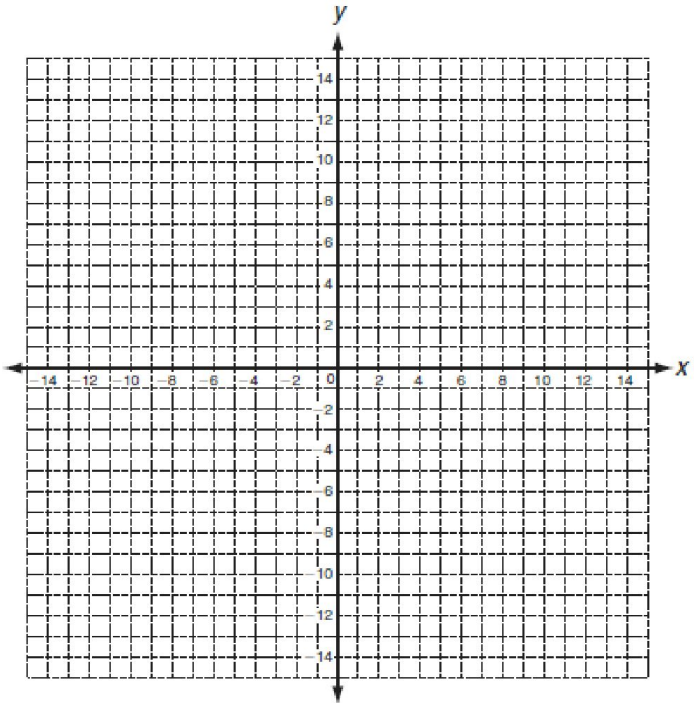
Quadratic Function Worksheet

Complete the table for each quadratic function, and then graph the parabola.

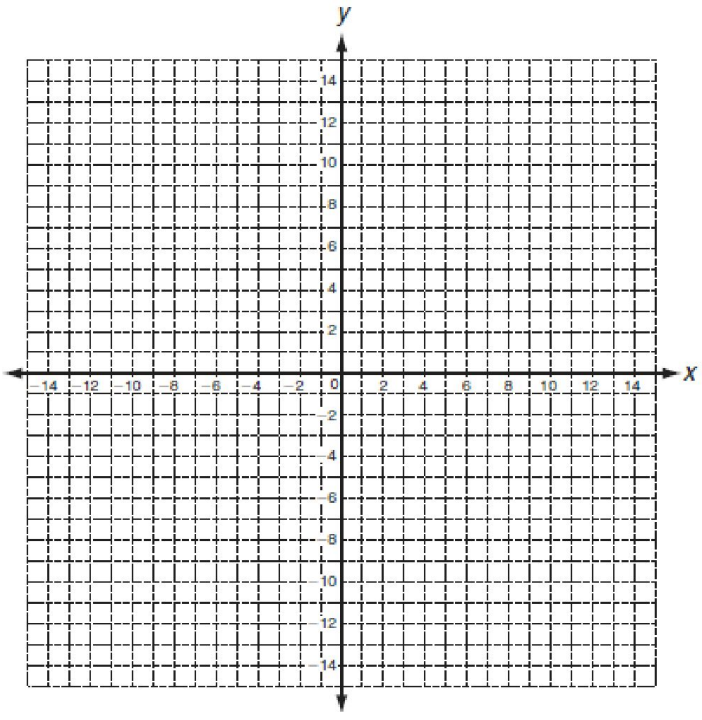
A.) $y = x^2$

x	x^2	y
3		
2		
1		
0		
-1		
-2		
-3		



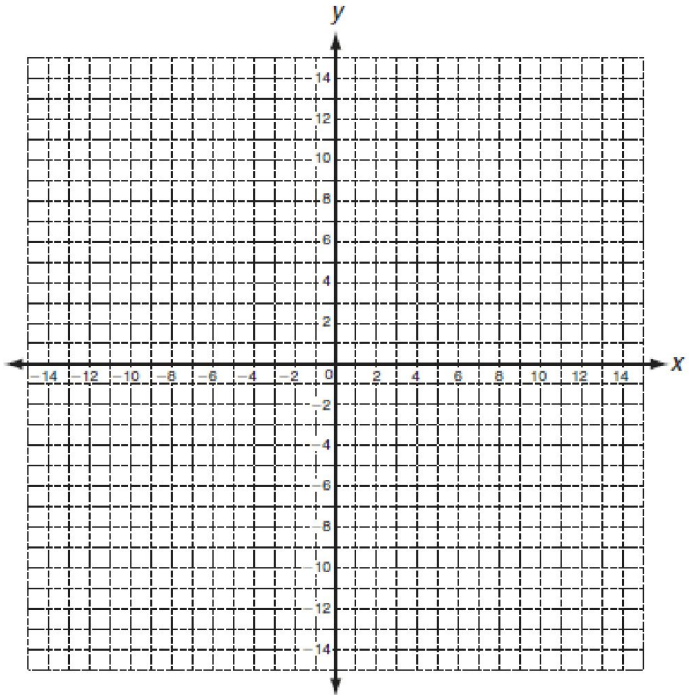
B.) $y = 2x^2 - 4$

x	$2x^2 - 4$	y
3		
2		
1		
0		
-1		
-2		
-3		



c.) $y = -\frac{1}{2}x^2 + 3$

x		y
6		
4		
2		
0		
-2		
-4		
-6		



1. At what value does each graph cross the y-axis?

   Graph A: _____ Graph B: _____ Graph C: _____

2. Do you see this "y-intercept" value in each corresponding equation?

3. If so, where?

4. In which direction does each graph "open"?

   Graph A: _____ Graph B: _____ Graph C: _____

5. Which value on each equation do you think determines the direction a graph opens?

6. What is the "leading coefficient" of each equation?

   Equation A: _____ Equation B: _____ Equation C: _____

7. Identify the leading coefficient and y-intercept of : $y = ax^2 + bx + c$.