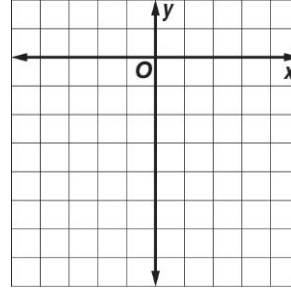
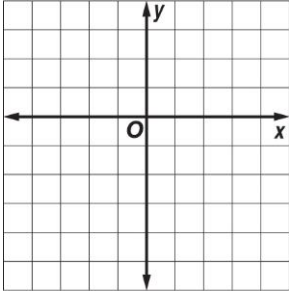


Study Guide: Graphs of Quadratic Functions

Use a table of values to graph each function. State the domain and the range.

$$y = -x^2 + 3$$

$$y = x^2 - 2x - 6$$



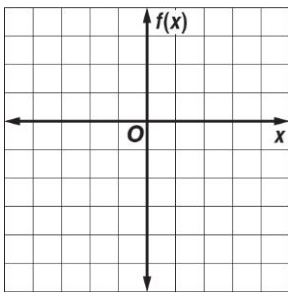
Find the indicated in the first column of the function listed at the top of each chart:

Characteristic:	$y = x^2 + 4x + 6$	$y = -3x^2 - 12x + 3$
Vertex		
Equation of Axis of Symmetry		
y-intercept of the function		

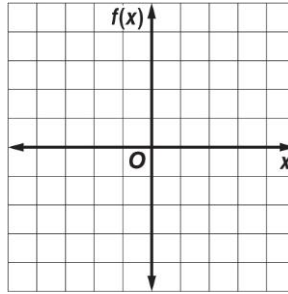
Characteristic:	$y = x^2 - 2x - 5$	$y = -x^2 + 4x - 1$
Determine whether the function has a <i>maximum</i> or a <i>minimum</i> value.		
State the maximum or minimum value.		
What are the domain and range of the function?		

Graph each function.

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



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



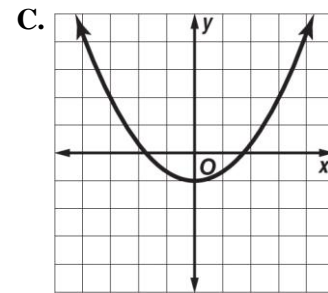
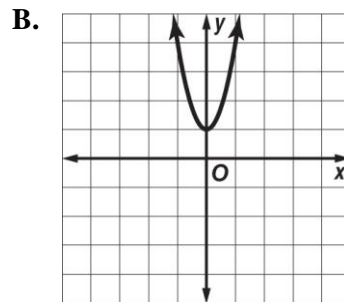
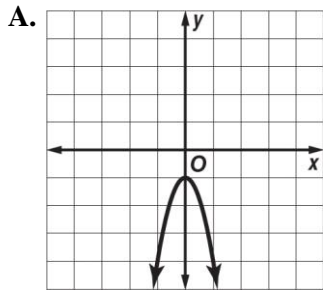
Describe how the graph of each function is related to the graph of $f(x) = x^2$.

$$g(x) = 2x^2 + 2$$

$$g(x) = -\frac{3}{4}x^2 - \frac{1}{2}$$

$$g(x) = -3(x + 4)^2$$

Match each equation to its graph.



$$y = -3x^2 - 1 \quad \underline{\hspace{2cm}}$$

$$y = \frac{1}{3}x^2 - 1 \quad \underline{\hspace{2cm}}$$

$$y = 3x^2 + 1 \quad \underline{\hspace{2cm}}$$