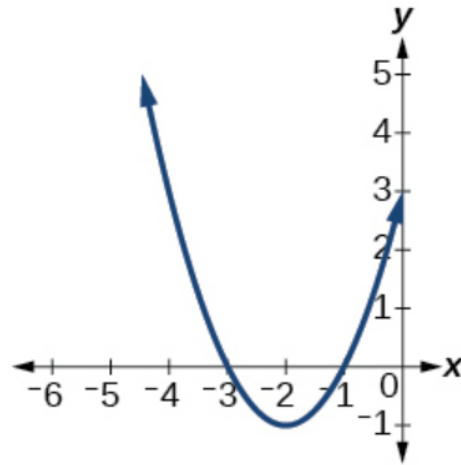


Exercise 56

For the following exercises, write the equation for the standard function represented by each of the graphs below.



Solution

This is the graph of a parabola that's been shifted to the left by 2 units and shifted down by 1 unit. Begin with the parent function.

$$x^2$$

Shift the graph to the left by 2 units.

$$(x + 2)^2$$

Shift the graph down by 1 unit.

$$y = (x - 2)^2 - 1$$