# Exercise 72

In Exercises 69–76, graph each function not by plotting points, but by starting with the graph of one of the standard functions presented in Figures 1.14–1.17 and applying an appropriate transformation.

$$y = (1 - x)^3 + 2$$

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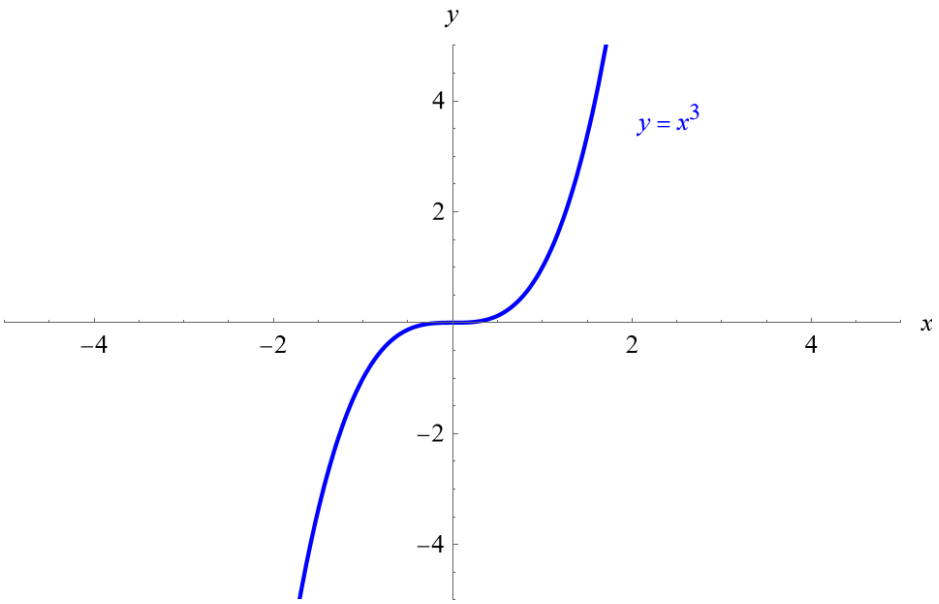
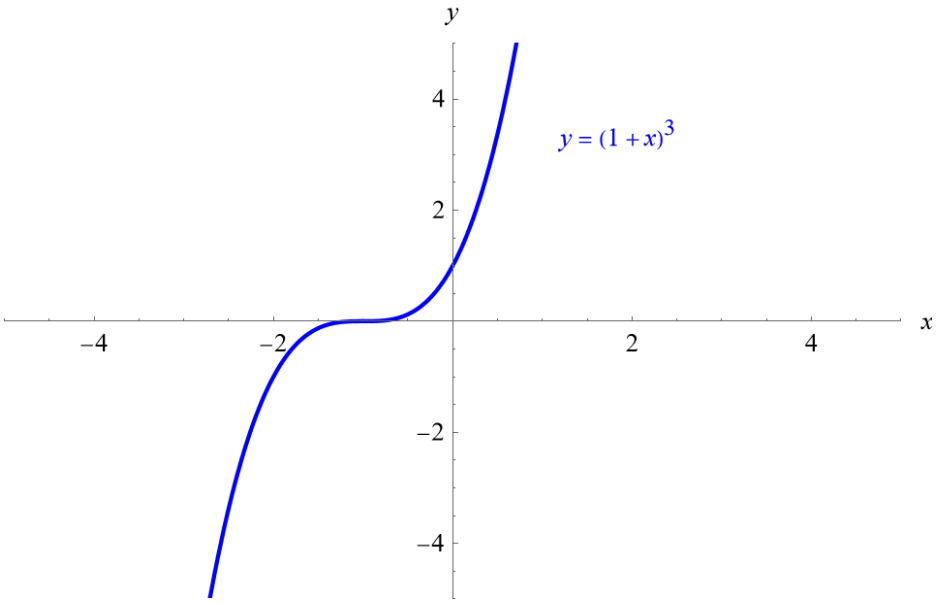
**Solution**

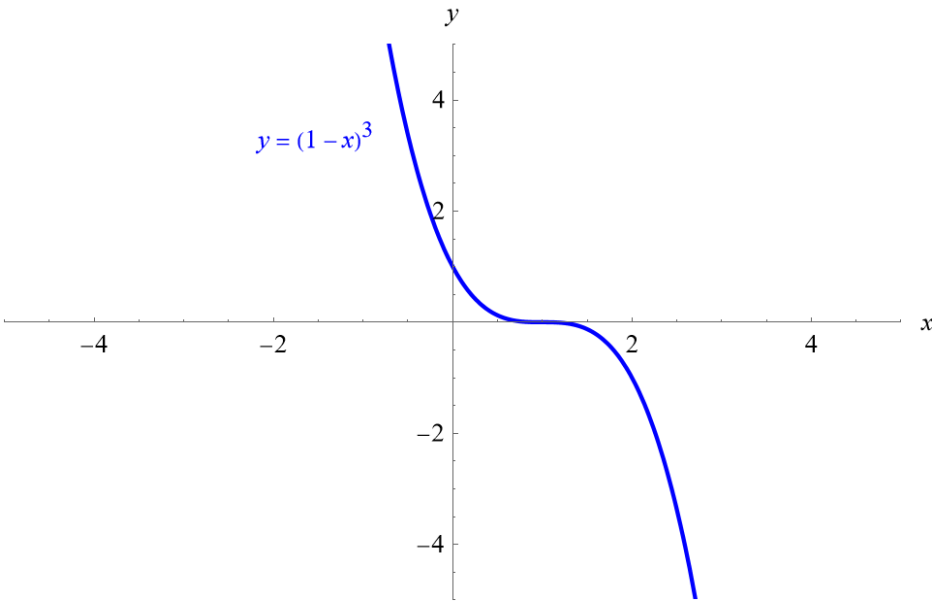
The parent function is $y = x^3$.




Replacing $x$ with $1 + x$ shifts the graph to the left by 1 unit.



Replacing $x$ with $-x$ reflects the graph over the $y$-axis.




Adding 2 to the function shifts the graph up by 2 units.