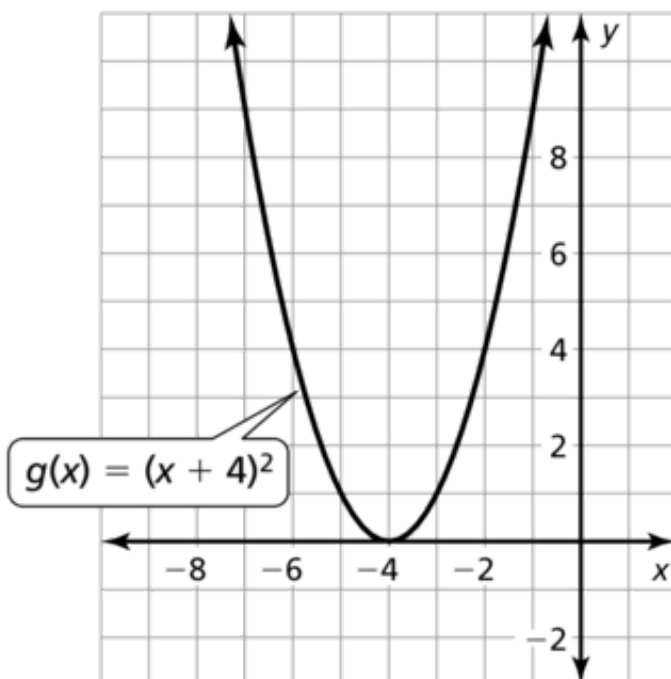


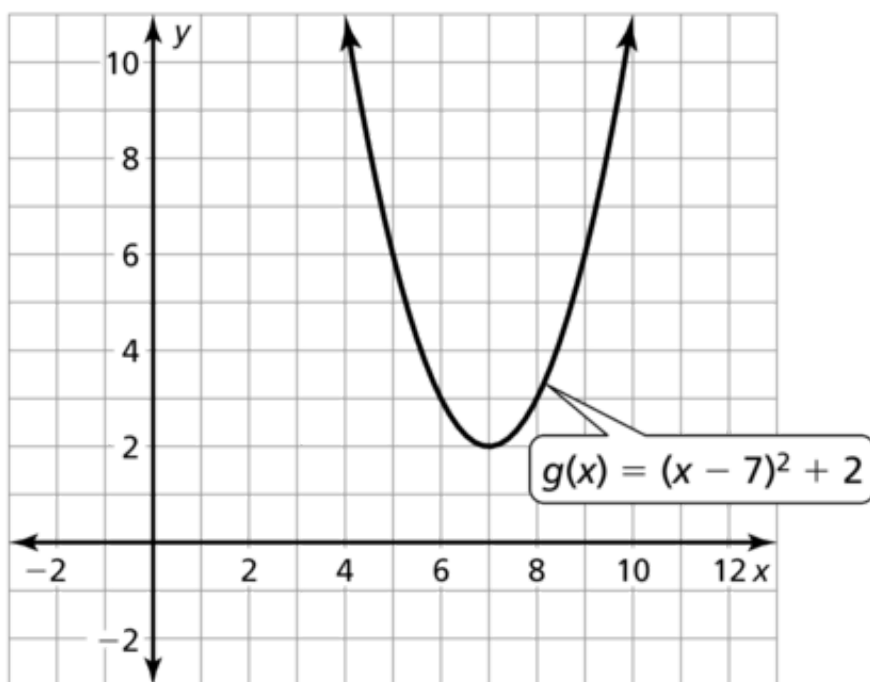
# Answer Presentation Tool

Book Algebra 2 ▼Chapter 2 ▼Section Chapter Review ▼Exercises 1-8, 13-17 (17 exercises)Display Cols 1 ▼ Show Answers

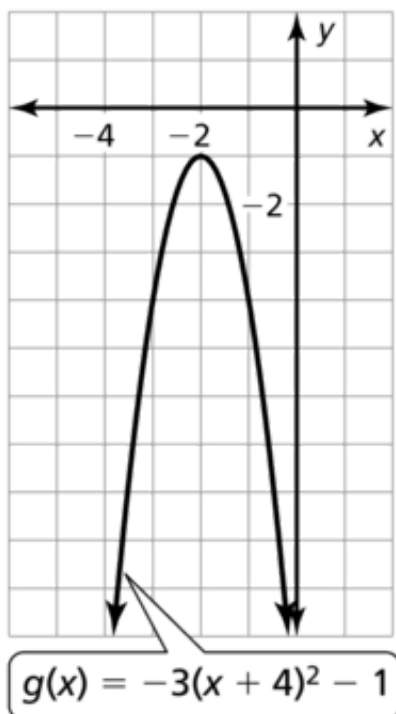
1. The graph is a translation 4 units left of the parent quadratic function.



2. The graph is a translation 7 units right and 2 units up of the parent quadratic function.



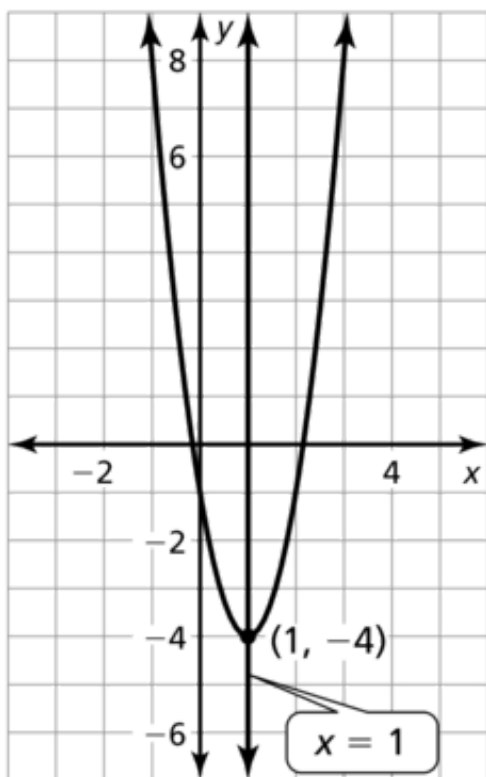
3. The graph is a vertical stretch by a factor of 3 followed by a reflection in the  $x$ -axis and a translation 2 units left and 1 unit down.



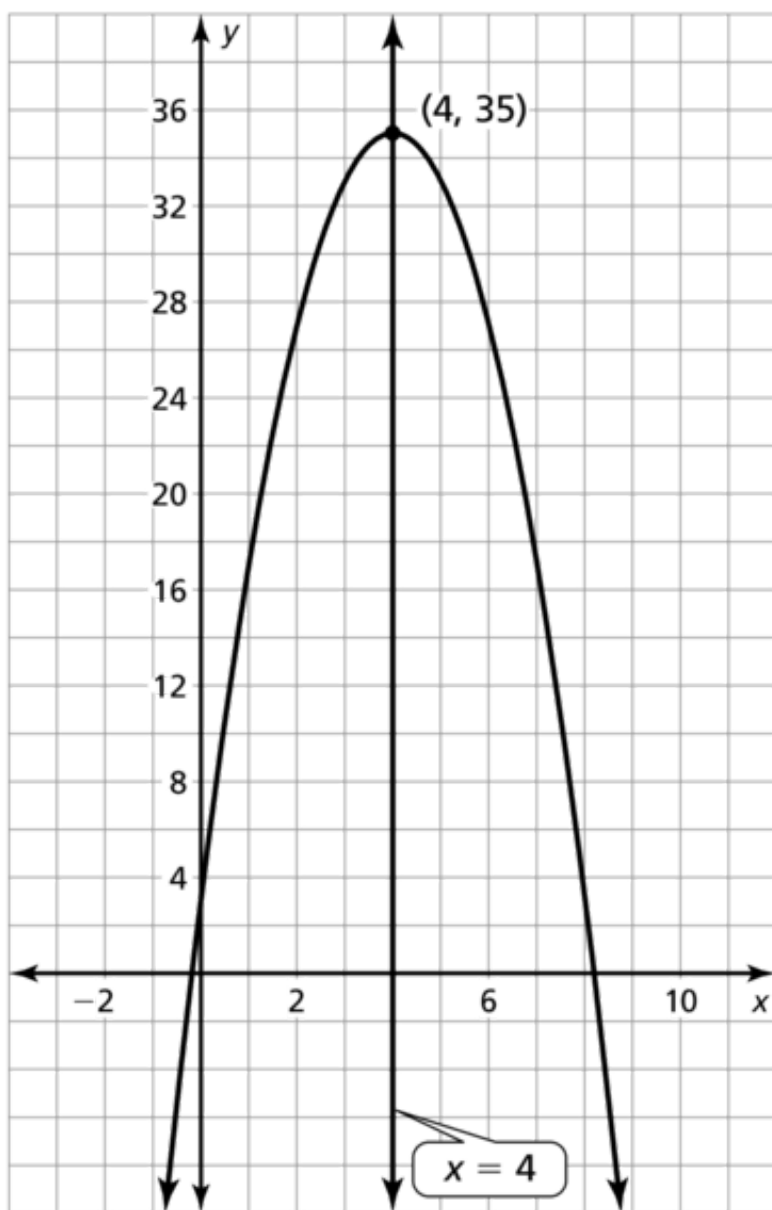
4.  $g(x) = \frac{9}{4}(x + 5)^2 - 2$

5.  $g(x) = (-x + 2)^2 - 2(-x + 2) + 3 = x^2 - 2x + 3$

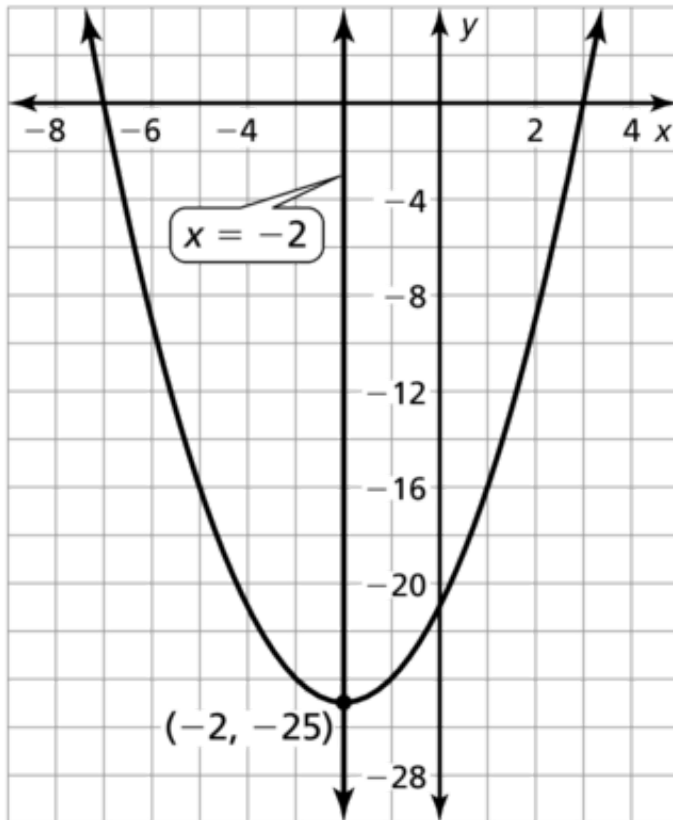
6. The minimum value is  $-4$ ; The function is decreasing to the left of  $x = 1$  and increasing to the right of  $x = 1$ .



7. The maximum value is 35; The function is increasing to the left of  $x = 4$  and decreasing to the right of  $x = 4$ .



8. The minimum value is  $-25$ ; The function is decreasing to the left of  $x = -2$  and increasing to the right of  $x = -2$ .



13.  $y = \frac{16}{81}(x - 10)^2 - 4$
14.  $y = -\frac{3}{5}(x + 1)(x - 5)$
15.  $y = 4x^2 + 5x + 1$
16. The average rate of change from  $(-4, 16)$  to the vertex is  $-6$  and the average rate of change from the vertex to  $(-1, 7)$  is 3.
17.  $y = -16x^2 + 150$ ; about 3.06 sec