

Name key

Unit 8 Day 3

Homework Graphing Quadratics Review



Describe in words (in the correct order) what transformation took place on the parent function $y = x^2$

$y = 6x^2$
vertical stretch by 6

$y = \frac{1}{5}x^2$
vertical shrink by $\frac{1}{5}$

$y = (x - 3)^2 + 5$
① right 3
② up 5

$y = -(x)^2 + 8$
① reflect x-axis
② up 8

$y = -x^2 - 4$
① reflect x-axis
② down 4

$y = -4x^2$
① vertical stretch by 4
② reflect x-axis

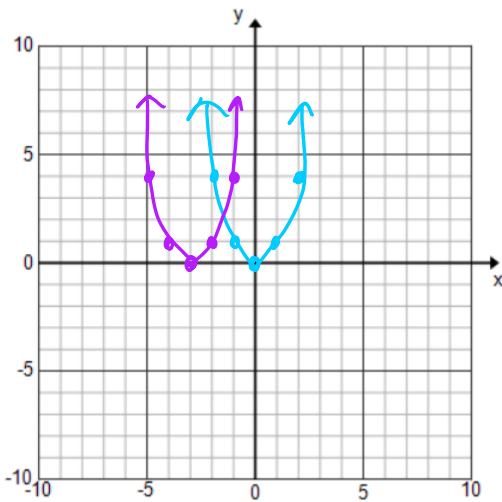
$y = \frac{1}{7}(x + 10)^2 - 1$
① left 10
② vertical shrink by $\frac{1}{7}$
③ down 1

$y = -(x + 4)^2 - 3$
① left 4
② reflect over x-axis
③ down 3

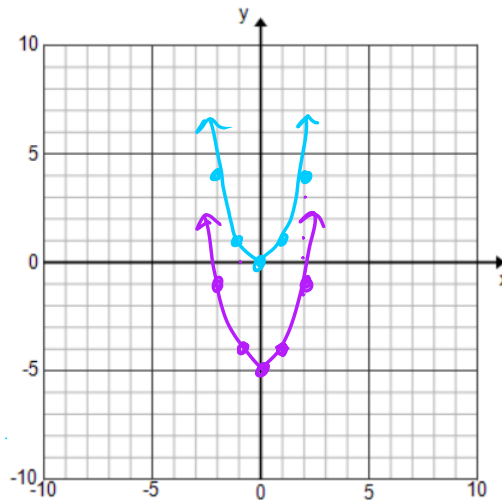
For the following graphs:

- Sketch the parent function.
- Apply the transformation (in the correct order)
- Describe in words.

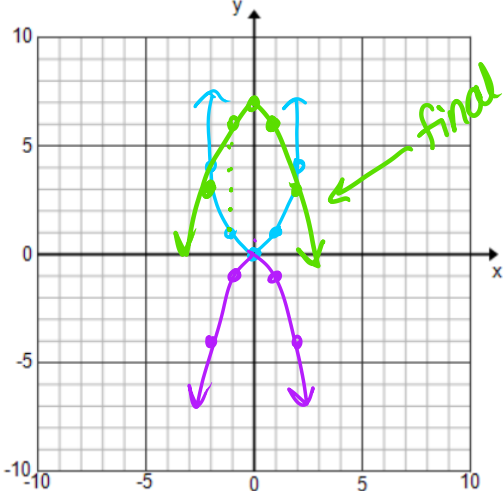
$y = (x - 3)^2$



$y = (-x)^2 - 5$



$y = -(x)^2 + 7$



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

