

Algebra I

More Transformations of Functions

Module 3 Lesson 13 Day 2 (Notes)

Name: _____

Date: _____

Objective: Students examine that a horizontal scaling with scale factor k of the graph of $y = f(x)$ corresponds to changing the equation from $y = f(x)$ to $y = kf(x)$. Use the graphs to write the equation of the function.

Graph the following function and answer the questions.

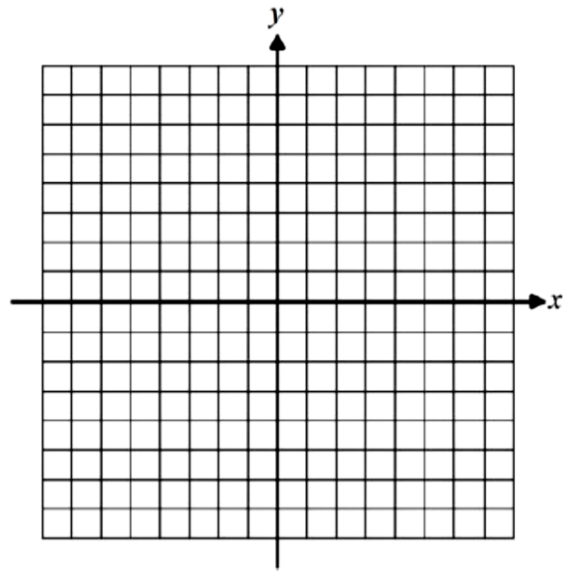
1. $g(x) = -2|x + 3| - 1$

a. Parent Function: _____

b. Transformation: _____

c. Domain for $g(x)$: _____

d. Range for $g(x)$: _____



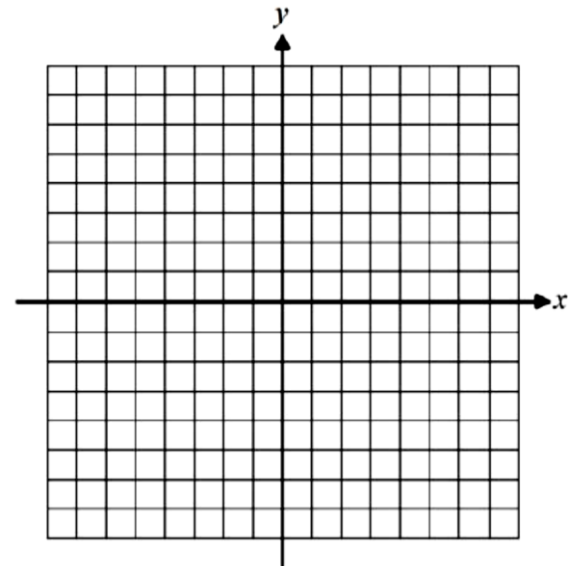
2. $g(x) = \frac{1}{4}|x - 1| + 3$

a. Parent Function: _____

b. Transformation: _____

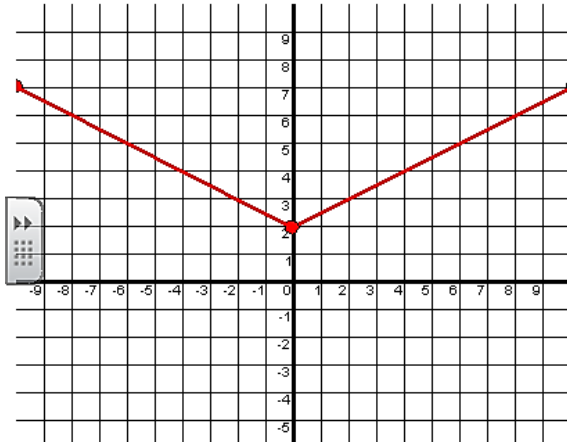
c. Domain for $g(x)$: _____

d. Range for $g(x)$: _____

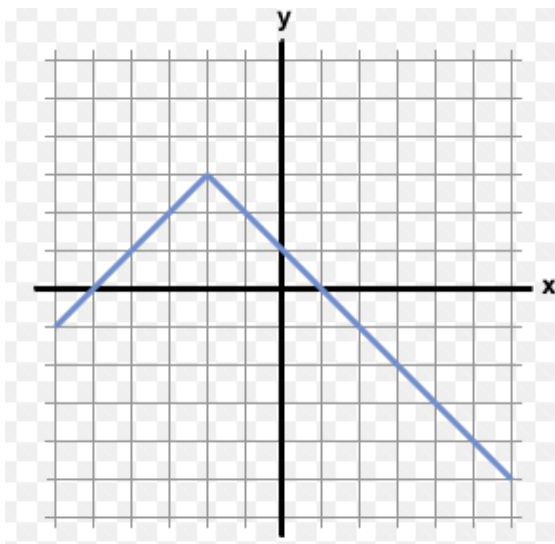


3. Identify the transformation(s) in each graph and write the equation for the function.

a.



b.



Given $y = af(x-h) + k$, state the effect that a , h , and k will have on the parent function.