

1.5 Parent Functions & Transformations

family of functions → a group of functions that display similar characteristics.

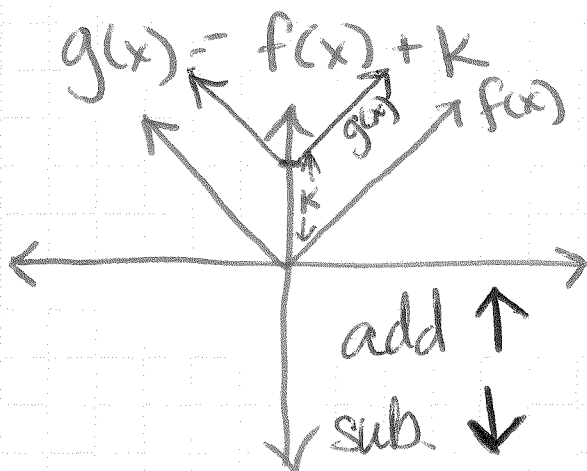
parent function - most basic function in the family.

Transformation: some change to the parent function

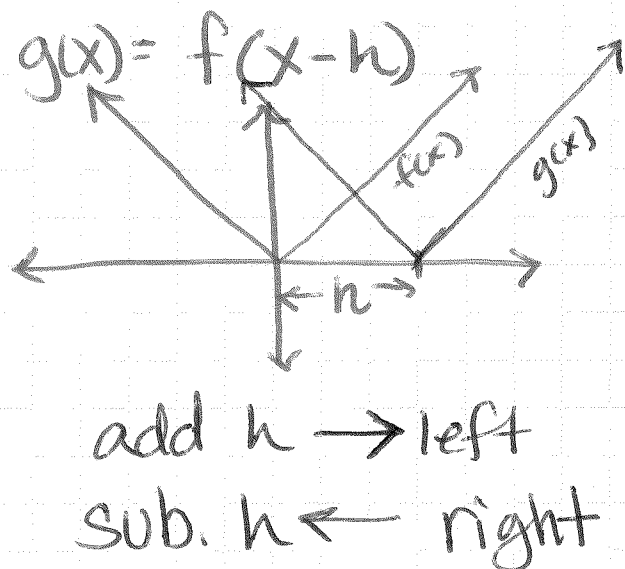
Translation Reflection Dilation
or a combo of these

Translation: moving the graph of a function without changing its shape. "slide" "shift"

vertical translation



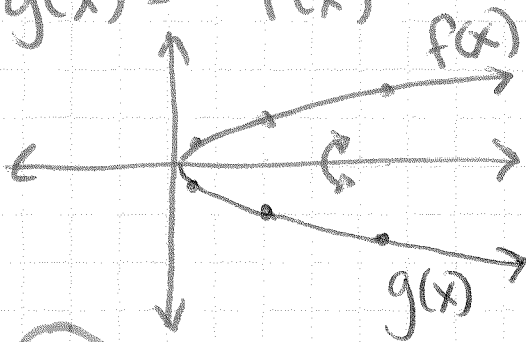
horizontal translation



Reflection: flip over the x- or y-axis.

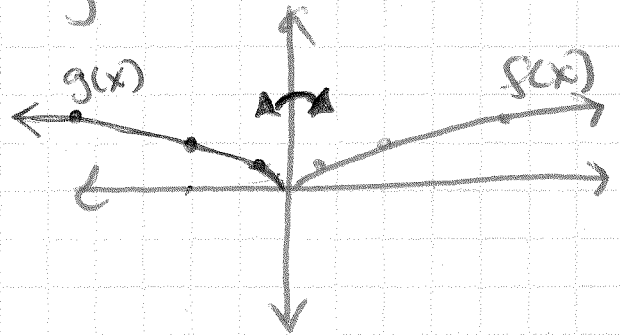
Reflect over x-axis

$$g(x) = -f(x)$$



Reflected over y-axis

$$g(x) = f(-x)$$



1.5

HW: pg 52: 9-12, 19-23, 55, 60-63

84-90 EVEN