

1.6 Graphical Transformations

Target 1D: Rigid and non-rigid transformations of parent functions (focus on quadratic, cubic, square root, and absolute value functions)

In your Laptop, open the file: 1.6.1 Graphical Transformation Sliders Activity
Change the sliders on each page to fill in the information below.

Vertical/Horizontal Translation (Shift)

General Form	Translation Direction	Sample Function
$y = f(x) + k$		
$y = f(x) - k$		
$y = f(x + h)$		
$y = f(x - h)$		

Vertical/Horizontal Stretch and Shrink (Dilation)

General Form	Dilation Description	Sample Function
$y = af(x)$		
$y = f(ax)$		

Reflection

General Form	Reflection Description	Sample Function
$y = -f(x)$		
$y = f(-x)$		

More Practice

Graphical Transformations

<http://www.regentsprep.org/regents/math/algtrig/atp9/funclesson1.htm>

<https://www.mathsisfun.com/sets/function-transformations.html>

<https://www.khanacademy.org/math/algebra2/manipulating-functions/stretching-functions/v/shifting-and-reflecting-functions>

https://academics.utep.edu/Portals/1788/CALCULUS%20MATERIAL/1_7%20TRANSFORMATION%20OF%20FNS.pdf

<https://www.youtube.com/watch?v=0a-AjP4UdnY>

<https://www.youtube.com/watch?v=3Q5Sy034fok>

Homework Assignment

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