



Function Transformations

Class

Algebra 2

Transformation	Function	Description
Horizontal Shift	$f(x + h)$	Shift left h units
Horizontal Shift	$f(x - h)$	Shift right h units
Vertical Shift	$f(x) + k$	Shift up k units
Vertical Shift	$f(x) - k$	Shift down k units
Reflection	$-f(x)$	Reflect across x -axis
Reflection	$f(-x)$	Reflect across y -axis
Vertical Stretch/Compression	$a f(x), a > 1$	Stretch vertically by a factor of a
Vertical Stretch/Compression	$a f(x), 0 < a < 1$	Compress vertically a factor of a
Horizontal Stretch/Compression	$f(ax), a > 1$	Compress horizontally by a factor of 1/a
Horizontal Stretch/Compression	$f(ax), 0 < a < 1$	Stretch horizontally by a factor of 1/a