

TRANSFORMATIONS in FUNCTION FORMAT

Here is a summary of how the transformations are expressed in function format

DILATIONS	
$af(x)$	Dilation of factor a away from the x-axis
$f\left(\frac{x}{a}\right)$	Dilation of factor a away from the y-axis

REFLECTIONS	
$-f(x)$	Reflection in the x-axis
$f(-x)$	Reflection in the y-axis

TRANSLATIONS	
$f(x) + c$	Translation of c units parallel to the y-axis If $c > 0$, graph goes up If $c < 0$, graph goes down
$f(x - h)$	Translation of h units parallel to the x-axis If $h > 0$, graph goes to the right If $h < 0$, graph goes to left