Let the original function be $f(x)$

To Graph	Drawing Technique	Change to $f(x)$
Vertical shift up $y = f(x) + k$, $k > 0$	Raises the graph of $f(x)$ k units up	Add k to $f(x)$
Vertical shift down $y = f(x) - k$, $k > 0$	Raises the graph of $f(x)$ k units down	Subtract k from $f(x)$
Horizontal shift to the right $y = f(x - k)$, $k > 0$	Shifts the graph of $f(x)$ k units to the right	Replace x with $x - k$
Horizontal shift to the left $y = f(x + k)$, $k > 0$	Shifts the graph of $f(x)$ k units to the left	Replace x with $x + k$
Vertical stretch $y = a[f(x)]$, $a > 1$	Vertically stretches the graph of $f(x)$ by a factor of a	Multiply $f(x)$ by a
Vertical compression $y = \dfrac{f(x)}{a}$, $a > 1$	Vertically compresses the graph of $f(x)$ by a factor of a	Divide $f(x)$ by a
Horizontal compression $y = f(ax)$, $a > 1$	Horizontally compresses the graph of $f(x)$ by a factor of a	Replace x with ax
Horizontal stretch $y = f\left(\dfrac{x}{a}\right)$, $a > 1$	Horizontally stretches the graph of $f(x)$ by a factor of a	Replace x with x/a
Reflection about the x-axis $y = -f(x)$	Reflects the graph of $f(x)$ about the x-axis	Multiply $f(x)$ by -1
Reflection about the y-axis $y = f(-x)$	Reflects the graph of $f(x)$ about the y-axis	Replace x with $-x$