## Exercise 1

When examining the formula of a function that is the result of multiple transformations, how can you tell a horizontal shift from a vertical shift?

## Solution

The formula of a function that is shifted horizontally and vertically looks like this.

$$
y=f(x+h)+v
$$

A number $h$ that is added to $x$ results in a horizontal shift, whereas a number $v$ that is added to the function $f$ results in a vertical shift.

