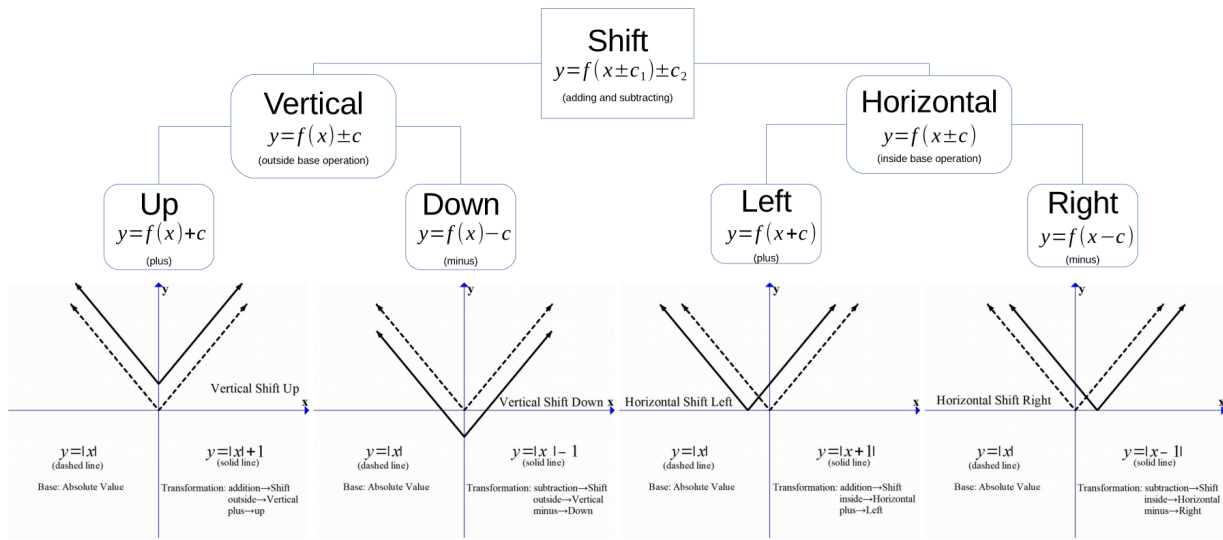


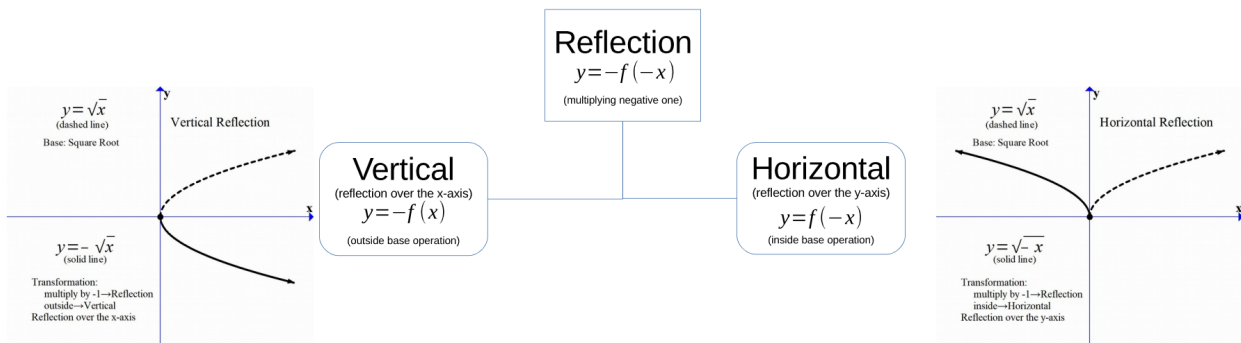
3.4 Transformation of Functions

▼ Transformations

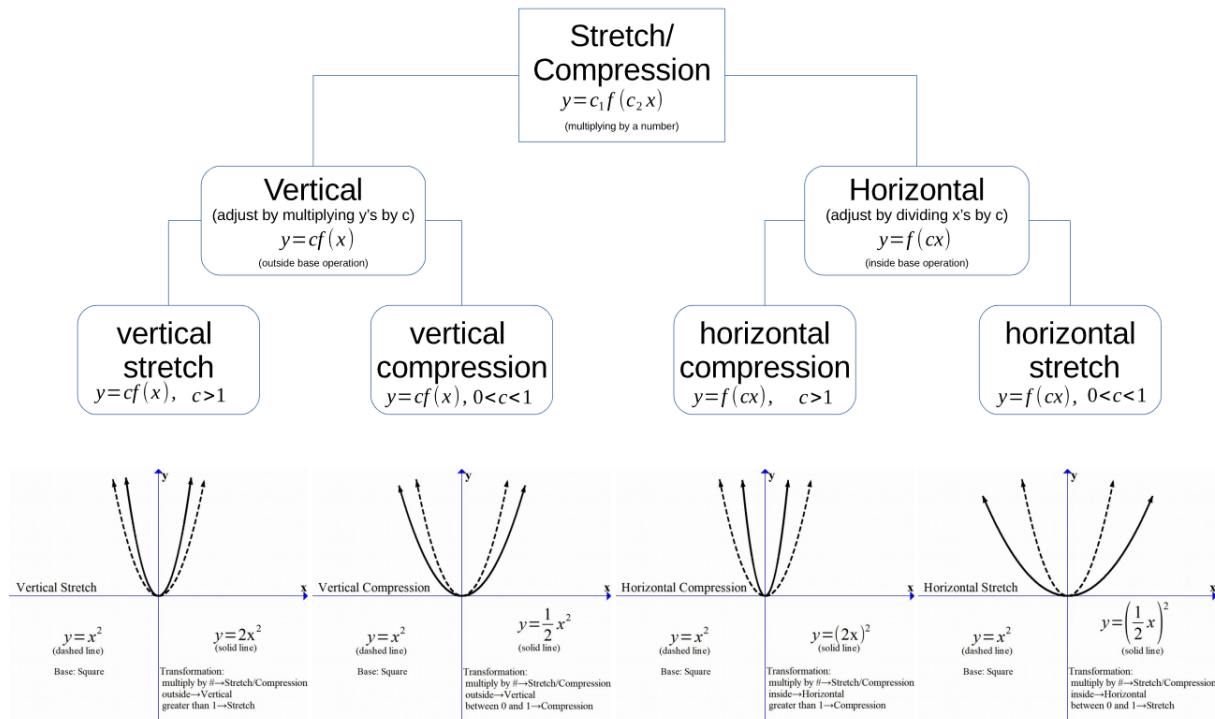
▼ Shift (add or subtract a number)



▼ Reflection (multiply by a negative)



▼ Stretch\Compression (multiply by a number not equal to 1)



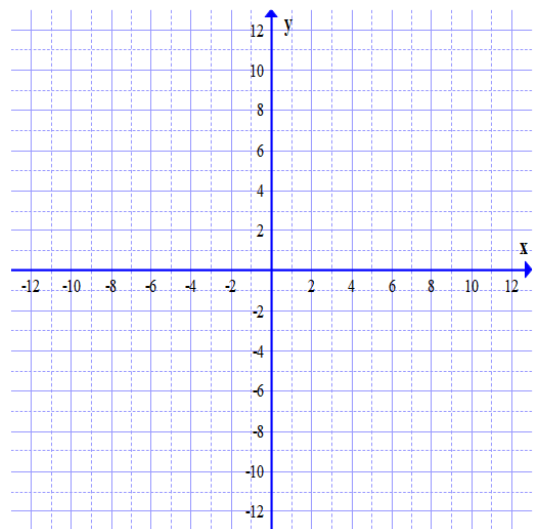
▼ Examples: Graphing with Transformations

▼ Example 1

$$f(x) = -(x - 2)^2 + 3$$

Base Function: _____

List Transformations:

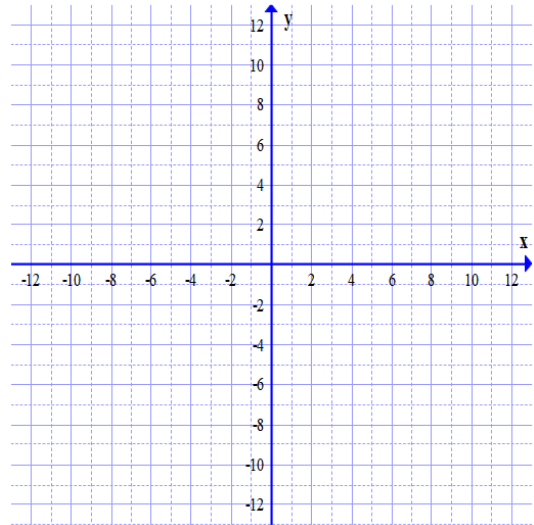


▼ Example 2

$$f(x) = -|x + 1| - 4$$

Base Function: _____

List Transformations:

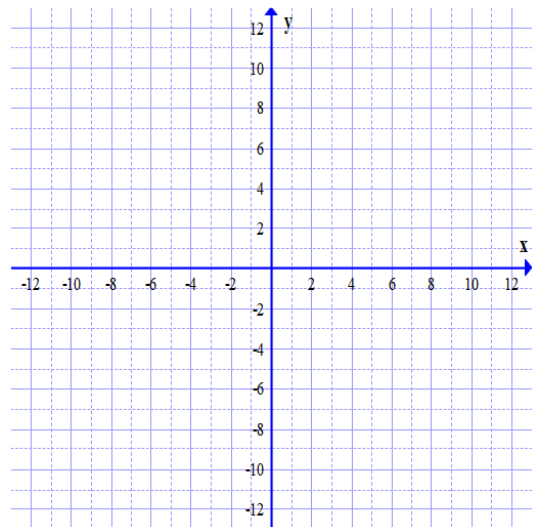


▼ Example 3

$$f(x) = -\sqrt{-x} + 2$$

Base Function: _____

List Transformations:

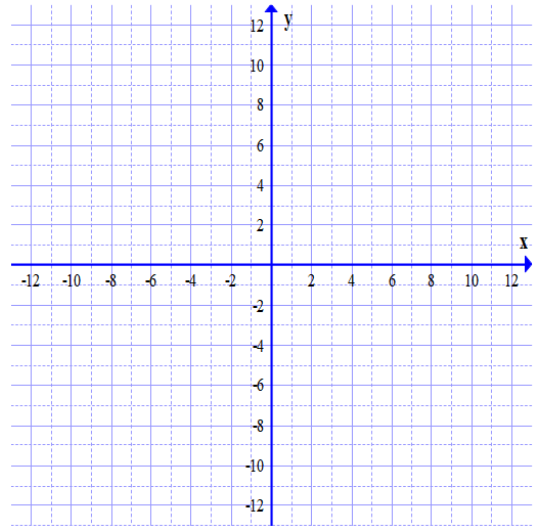


▼ Example 4

$$f(x) = (x + 1)^3 - 4$$

Base Function: _____

List Transformations:



▼ Desmos Activity

<https://student.desmos.com/join/4cygw4>