Shifts, stretches and reflections

1. Y-Stretch: y = k * f(x)

The height of each point on the original graph is multiplied by a number. If k is less than 1, then the graph is squashed, if the number is larger than one, the graph is stretched.

2. Vertical-shift: y = f(x) + a

This is where the whole graph of f(x) is moved up or down the y-axis according to the value of a.

3. Horizontal-Shift: y = f(x - a)

The whole graph slides to left or right according to the value of a. Positive value of a moves the graph to the left and negative value of a moves it to the right.

4. Reflection wrt y - axes: y = -f(x)

The graph of f(x) is reflected with respect to the x-axis.