Graphs of Common Functions:

\[ f(x) = c \]  
(\text{constant function})

\[ f(x) = |x| \]  
(abs. value function)

\[ f(x) = \sqrt{x} \]  
(sq. root function)

\[ f(x) = \sqrt[3]{x} \]  
(cube root function)

\[ f(x) = x \]  
(\text{identity function})

\[ f(x) = x^2 \]  
(stand. quadratic function)

\[ f(x) = x^3 \]  
(stand. cubic function)

Vertical Shifts \( c > 0 \)

The graph of \( y = f(x) + c \) is the graph of \( y = f(x) \) shifted \( c \) units upward.

The graph of \( y = f(x) - c \) is the graph of \( y = f(x) \) shifted \( c \) units downward.

Horizontal Shifts \( c > 0 \)

The graph of \( y = f(x + c) \) is the graph of \( y = f(x) \) shifted \( c \) units left.

The graph of \( y = f(x - c) \) is the graph of \( y = f(x) \) shifted \( c \) units right.