

**REFLECTION OVER X-AXIS –
LINEAR FUNCTION**

$$f(x) = -x$$

**VERTICAL STRETCH – LINEAR
FUNCTION**

SHIFT UP – QUARTIC FUNCTION

$$f(3x) = x$$

**HORIZONTAL SHRINK – LINEAR
FUNCTION**

SHIFT UP – LINEAR FUNCTION

$$f(x) = x + 3$$

**REFLECTION OVER X-AXIS –
QUADRATIC FUNCTION**

SHIFT RIGHT – LINEAR FUNCTION

$$f(x + 5) = x$$

**SHIFT LEFT – QUADRATIC
FUNCTION**

SHIFT UP – QUADRATIC FUNCTION

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

**REFLECTION OVER X-AXIS – CUBIC
FUNCTION**

**VERTICAL STRETCH – QUADRATIC
FUNCTION**

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

SHIFT UP – CUBIC FUNCTION

**HORIZONTAL SHRINK –
QUADRATIC FUNCTION**

$$f\left(\frac{2}{3}x\right) = x^2$$

SHIFT DOWN – CUBIC FUNCTION

**HORIZONTAL STRETCH –
QUADRATIC FUNCTION**

$$f(4x) = x^2$$

**VERTICAL SHRINK – CUBIC
FUNCTION**

**HORIZONTAL SHRINK – CUBIC
FUNCTION**

$$f\left(\frac{1}{4}x\right) = x^3$$

$$f(x) = x^4 + 6$$

SHIFT LEFT – CUBIC FUNCTION

$$f(x - 5) = x^3$$

$$f\left(\frac{1}{2}x\right) = x$$

SHIFT DOWN – LINEAR FUNCTION

$$f(x) = x - 3$$

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

SHIFT LEFT – LINEAR FUNCTION

$$f(x - 4) = x$$

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

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

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

$$f(x) = x^3 - 7$$

$$f(x) = \frac{3}{8}x^3$$