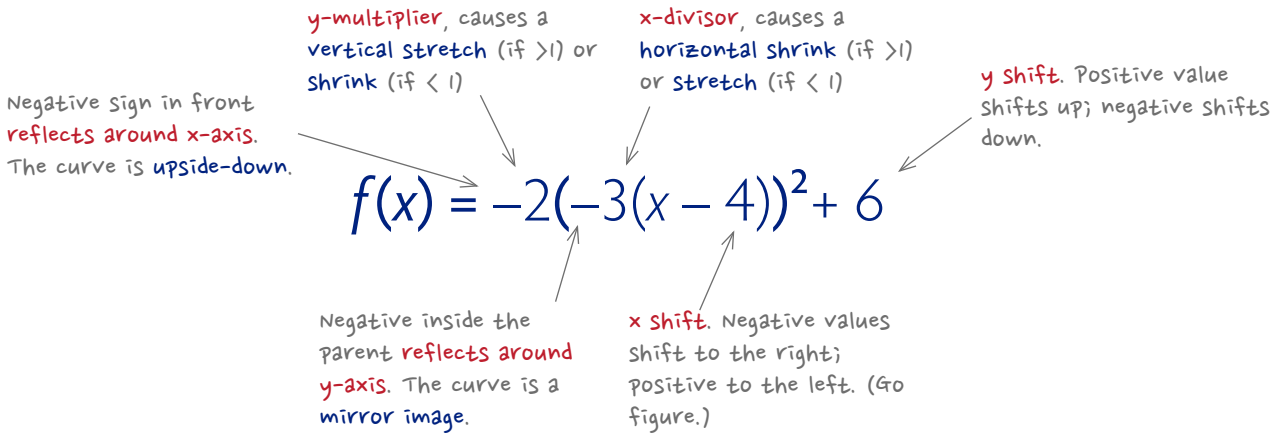
Parent Functions & Transformations

Anatomy of a Transformation, applied to $f(x) = x^2$



Notes

- You should apply these transformations left-to-right:
  - Flip around *x*-axis (if any), vertical shrink/stretch, flip around *y*-axis (if any), horizontal shrink/stretch, shift *x*, shift *y*.
- Note that the transformations that apply to *x* are generally the reverse of what intuition would tell you:
  - The number inside the parent function is an *x divisor,* instead of multiplier; the "3" in the above example will make the graph ⅓ as wide as normal.
  - The *x* offset is to the left when positive, to the right when negative.