

1.3 Transformations of Functions

Learning Goal: We are learning to apply transformations to parent functions and how to use transformations for sketching.

This section is pure review of material from Grade 11. If you've forgotten certain aspects of the concepts, ask for help. Recall that there are three basic transformations of functions. You've probably heard of Flips, Stretches and Shifts. More formal mathematical terms would be Reflections, Dilations and Translations, respectively. Recall also that transformations can occur both vertically and horizontally.

Definition 1.3.1

Given a function $f(x)$, then we denote transformation to $f(x)$ as

Success Criteria

- I can use the value of a to determine if there is a vertical stretch/reflection in the x -axis.
- I can use the value of k to determine if there is a horizontal stretch/reflection in the y -axis.
- I can use the value of d to determine if there is a horizontal translation.
- I can use the value of c to determine if there is a vertical translation.