

Class Discussion

Unit 1 Topic 4 Part 2 non-rigid transformation

Objective: Identify the rigid and non-rigid transformation of a given quadratic function

Introduce scaling

Vertically $h(x) = cf(x)$

Horizontally $h(x) = f(cx)$

Example 1: Use transformations to graph $y = -\frac{1}{2}(x-1)^2 + 4$,

identify the translations, reflection, and the non-rigid transformation

Example 2: $y = \frac{1}{3}(x+2)^2 + 1$

Different parent functions:

The exponential function: $y = a^x$

The logarithmic function: $y = \log_a x$

Example 3: $y = \frac{2x+6}{x+2}$