

Section 5.3 – Square Root Functions and Inequalities

I can identify the domain and range of a square root function.

I can graph a square root function using translations, reflections, and stretches.

Parent Function:

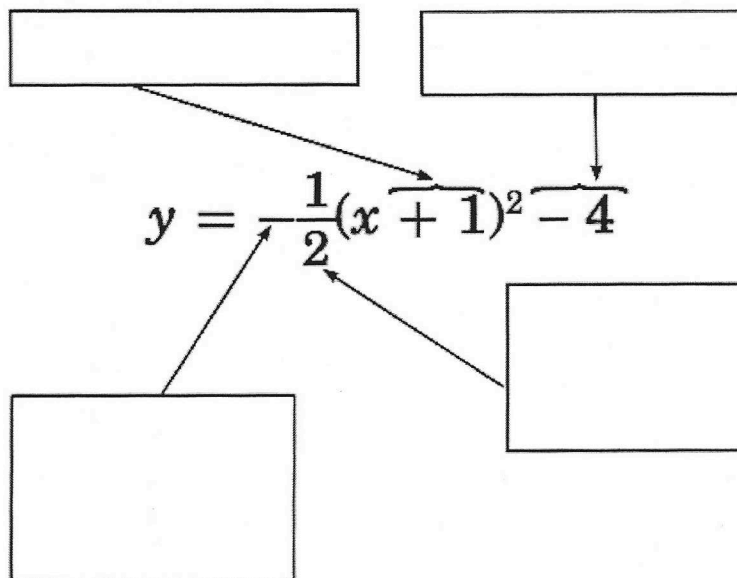
Domain:

Range:

Starting Point:

Active Vocabulary

Review Vocabulary Describe how each component of this quadratic function transforms the graph of the parent quadratic function $y = x^2$. (Lesson 4-7)



Transformations of Square Root Functions:

$f(x) =$

h- Horizontal Translation

k- Vertical Translation

a- Orientation & Shape
if $a < 0$,

Domain:

Range: if $a > 0$, then

if $|a| > 1$,

if $a < 0$, then

if $0 < |a| < 1$,

Square Root Functions

Identify the domain and range for the function

$$f(x) = \sqrt{2x + 6} - 3.$$

