

Parent Function Name:

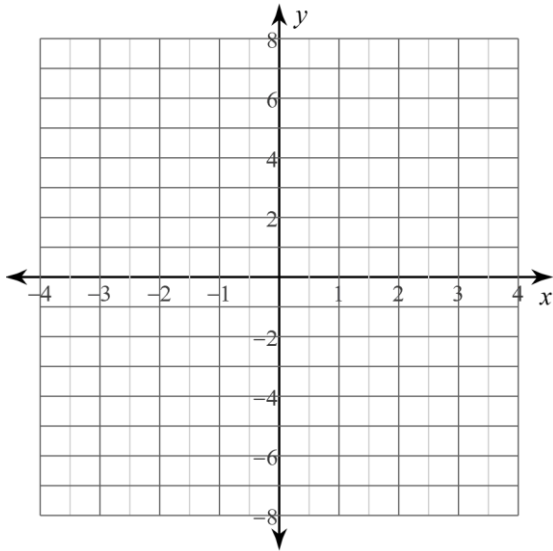
Square Root function

Parent Function equation: \_\_\_\_\_

Table of values for parent function:

x	-1	0	1	4	9
y					

Graph of Parent function:



General Transformation equation:

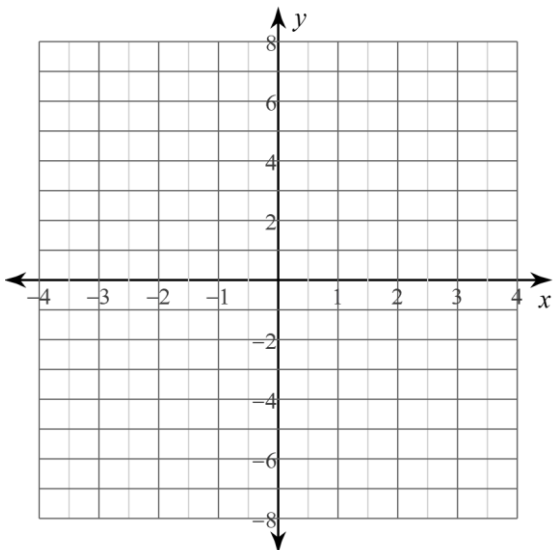
\_\_\_\_\_

Transformed equation:  $y = -\sqrt{x + 1} + 2$

Verbal Description of transformation:

\_\_\_\_\_

Graph of the transformed equation:



Analysis of the Parent Function:

Domain:

Range:

Where Increasing:

Where Decreasing:

Where Positive:

Where Negative:

Absolute Min/Max Location:

End Point:

y-intercept:

x-intercept:

Average Rate of change from  $x = 0$  to  $x = 1$

Average Rate of change from  $x = 0$  to  $x = 4$

Analysis of the Transformed Equation:

Domain:

Range:

Where Increasing:

Where Decreasing:

Where Positive:

Where Negative:

Absolute Min/Max Location:

End Point:

y-intercept:

x-intercept:

Average Rate of change from  $x = -1$  to  $x = 0$

Average Rate of change from  $x = -1$  to  $x = 3$