

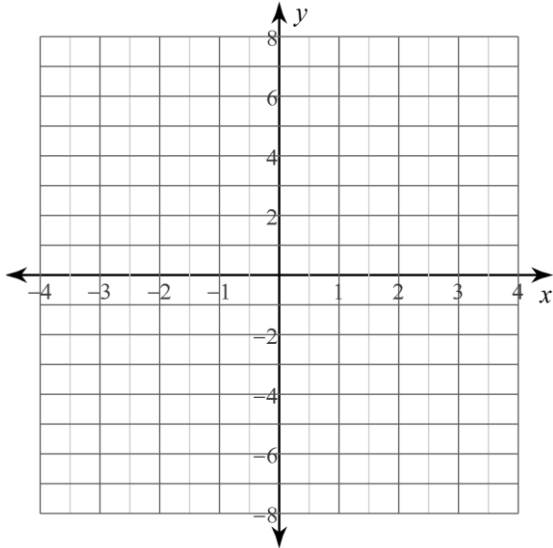
## Cube function

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

Table of values for parent function:

x	-2	-1	0	1	2
y					

Graph of Parent function:



General Transformation equation:

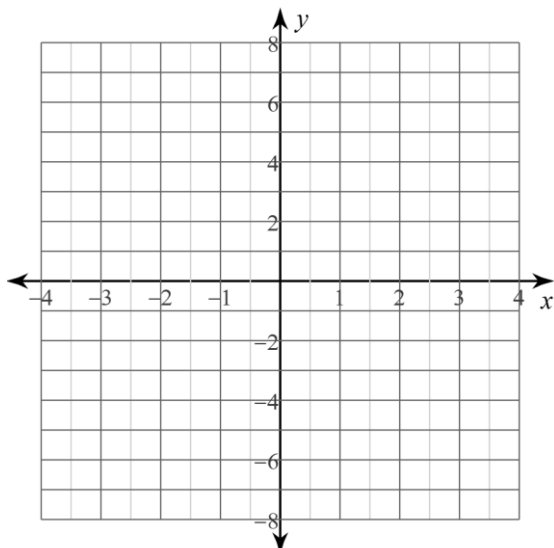
\_\_\_\_\_

Transformed equation:  $y = -(x - 2)^3 + 1$

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:

Inflection Point:

y-intercept:

x-intercept:

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

Average Rate of change from  $x = 0$  to  $x = 2$

Analysis of the Transformed Equation:

Domain:

Range:

Where Increasing:

Where Decreasing:

Where Positive:

Where Negative:

Absolute Min/Max Location:

Inflection Point:

y-intercept:

x-intercept:

Average Rate of change from  $x = 2$  to  $x = 3$ :

Average Rate of change from  $x = 2$  to  $x = 4$ :