Name _____ Date _____ Class _____

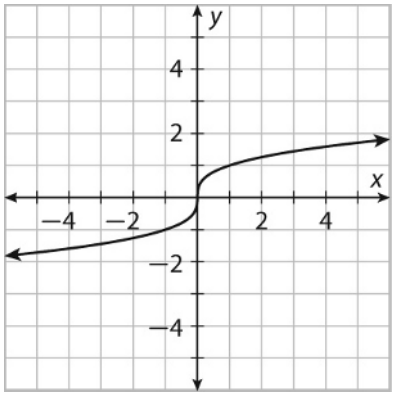
LESSON 10-3

Graphing Cube Root Functions

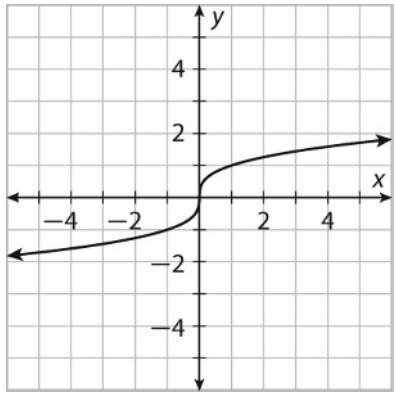
Practice and Problem Solving: A/B

Graph each cube root function. Then describe the graph as a transformation of the graph of the parent function. (The graph of the parent function is shown.)

1. $g(x) = \sqrt[3]{x-3} + 2$

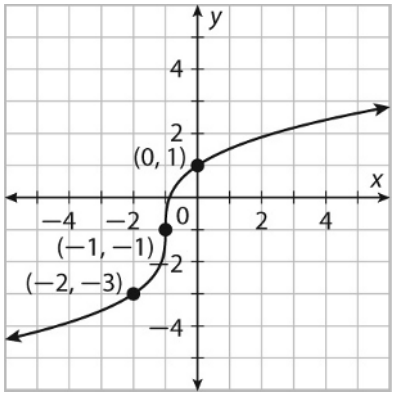


2. $g(x) = \frac{1}{2}\sqrt[3]{x+2} - 3$

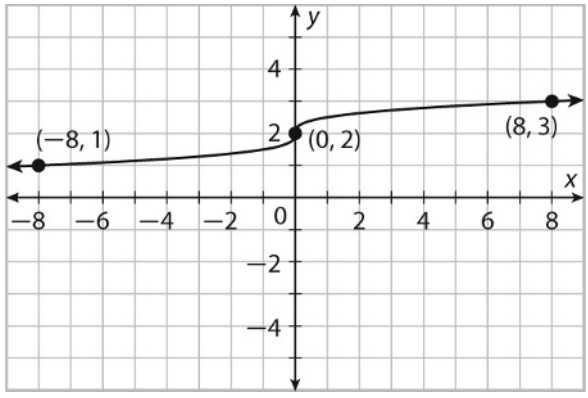


Write the equation of the cube root function shown on the graph. Use the form $g(x) = a\sqrt[3]{x-h} + k$.

3.



4.



Write an equation, $g(x)$, for the transformation equation described.

5. The graph of $f(x) = \sqrt[3]{x}$ is reflected across the *y*-axis and then translated 4 units down and 12 units to the left.

6. The graph of $f(x) = \sqrt[3]{x}$ is stretched vertically by a factor of 8, reflected across the *x*-axis, and then translated 11 units to the right.