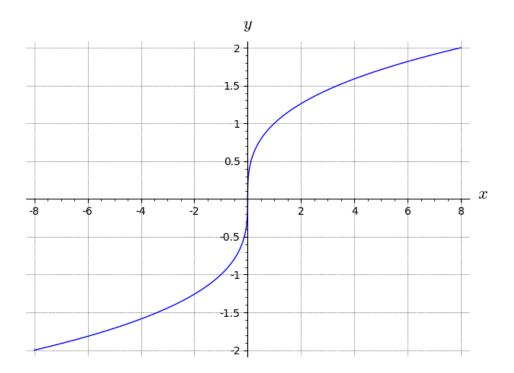
## Cube Root Function

The cube root function has the form  $f(x) = \sqrt[3]{x}$ .



Properties of the cube root function  $f(x) = \sqrt[3]{x}$ :

- Domain: All real numbers,  $(-\infty, \infty)$
- Range: All real numbers,  $(-\infty, \infty)$
- Symmetry: f is an odd function. Its graph is symmetric about the origin.
- Increasing/Decreasing: f is increasing on  $(-\infty, \infty)$ .
- Extreme values: None.
- Interesting features:

- The graph  $y = \sqrt[3]{x}$  is the reflection of the graph of  $y = x^3$  about the line y = x.