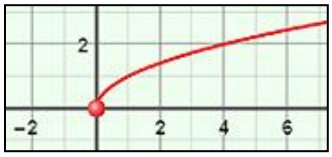
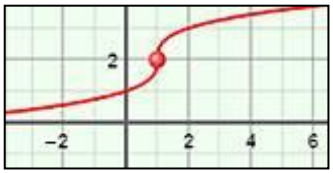
Vocabulary: Radical Functions

Vocabulary

- Cube root – a number that, when cubed, yields the original number.
  - The symbol for cube root is $\sqrt[3]{\ }$.
  - For example, the cube root of 64 is 4, or, symbolically, $\sqrt[3]{64} = 4$.
- Domain – the set of all *x*-values of a relation or function.
- Endpoint – the point at which a graph, segment, or ray starts or ends.
  - The endpoint of the square root function graphed to the right is at (0, 0).



- Inflection point – a point at which a curve changes from concave up to concave down, or vice versa.
  - The inflection point of the cube root function graphed to the right is at (1, 2).



- Radical function – a function that contains a radical expression.
  - Square root and cube root functions are two types of radical functions.
  - A general form of a square root function is $y = a\sqrt{x-h} + k$, where $a \neq 0$.
  - A general form of a cube root function is $y = a\sqrt[3]{x-h} + k$, where $a \neq 0$.
- Range – the set of all *y*-values of a relation or function.
- Square root – a number that, when squared, yields the original number.
  - The symbol for square root is $\sqrt{\ }$.
  - For example, the square root of 36 is 6, or, symbolically, $\sqrt{36} = 6$.