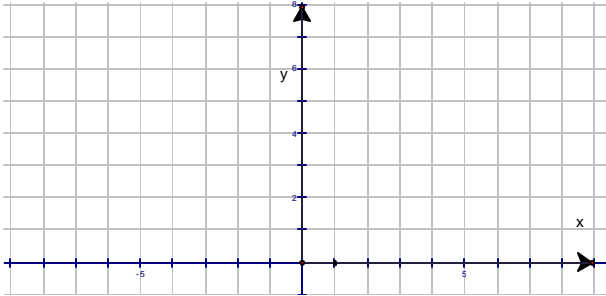


## 2.5 Graphs of Basic Functions

**Constant Function**  $f(x) = k, k \in \mathbb{R}$



Domain:

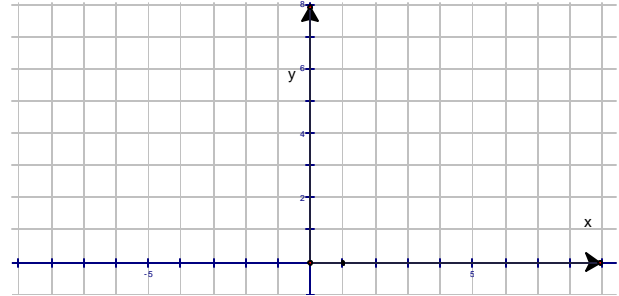
Range:

Intercepts:

Increasing / Decreasing:

Constant:

**Square Function**  $f(x) = x^2$



Domain:

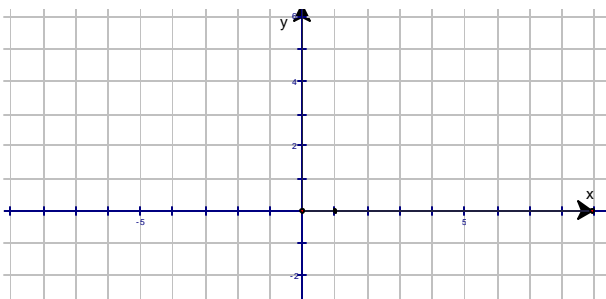
Range:

Intercepts:

Increasing / Decreasing:

Constant:

**Identity Function**  $f(x) = x$



Domain:

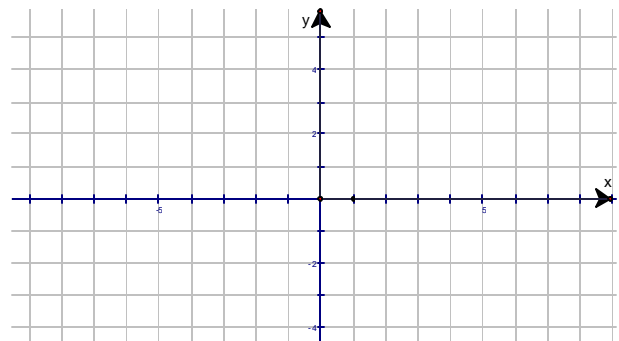
Range:

Intercepts:

Increasing / Decreasing:

Constant:

**Cube Function**  $f(x) = x^3$



Domain:

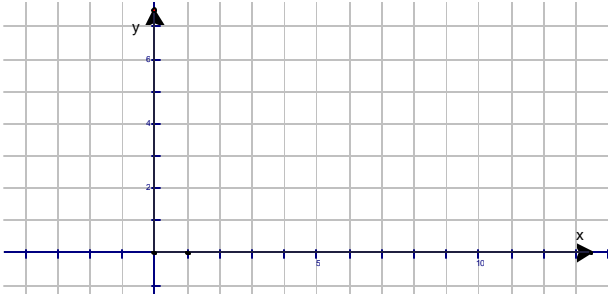
Range:

Intercepts:

Increasing / Decreasing:

Constant:

**Square Root Function**  $f(x) = \sqrt{x}$



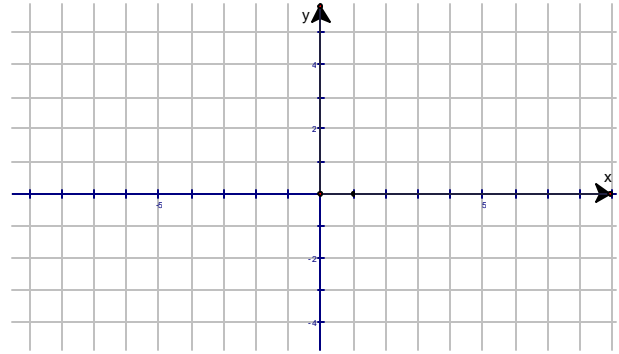
Domain:                      Range:

Intercepts:

Increasing / Decreasing:

Constant:

**Reciprocal Function**  $f(x) = \frac{1}{x}$



Domain:                      Range:

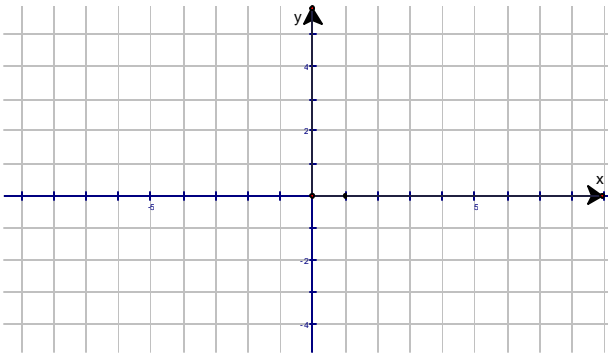
Intercepts:

Increasing / Decreasing:

Constant:

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**Cube Root Function**  $f(x) = \sqrt[3]{x}$



Domain:                      Range:

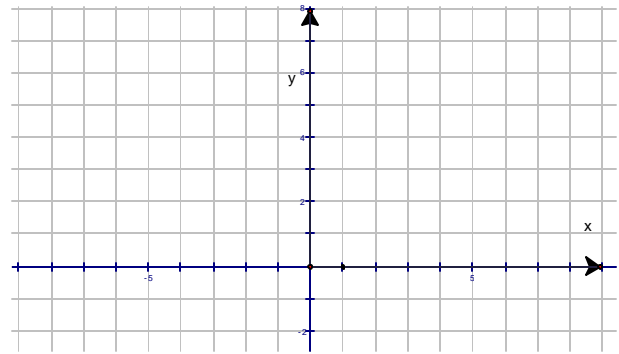
Intercepts:

Increasing / Decreasing:

Constant:

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**Absolute Value Function**  $f(x) = |x|$



Domain:                      Range:

Intercepts:

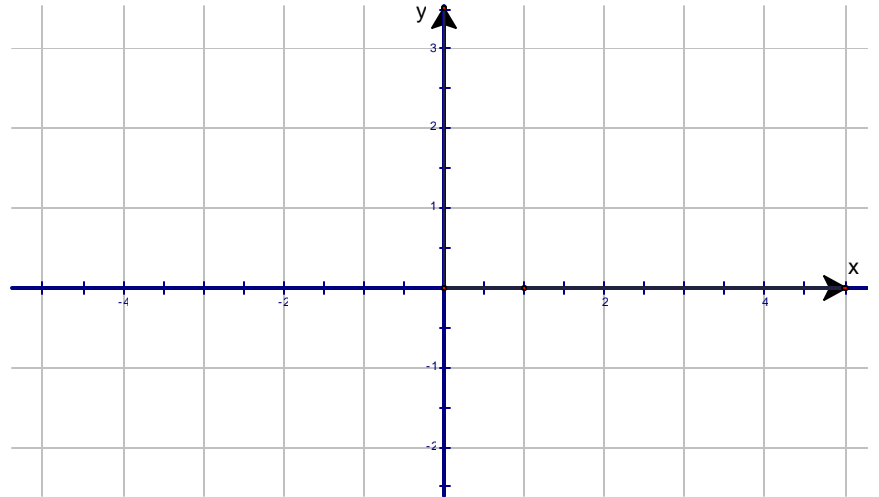
Increasing / Decreasing:

Constant:

## Greatest Integer Function

$$f(x) = \text{int}(x)$$

The greatest integer less than or equal to  $x$ .



Domain:

Range:

Intercepts:

Increasing / Decreasing:

Constant: