

Parent Function	Graph	Parent Function	Graph
$y = x$ Linear, Odd Domain: $(-\infty, \infty)$ Range: $(-\infty, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow -\infty$ $x \rightarrow \infty, y \rightarrow \infty$		$y =  x $ Absolute Value, Even Domain: $(-\infty, \infty)$ Range: $[0, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow \infty$ $x \rightarrow \infty, y \rightarrow \infty$	
$y = x^2$ Quadratic, Even Domain: $(-\infty, \infty)$ Range: $[0, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow \infty$ $x \rightarrow \infty, y \rightarrow \infty$		$y = \sqrt{x}$ Radical, Neither Domain: $[0, \infty)$ Range: $[0, \infty)$ End Behavior: $x \rightarrow \infty, y \rightarrow \infty$	
$y = x^3$ Cubic, Odd Domain: $(-\infty, \infty)$ Range: $(-\infty, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow -\infty$ $x \rightarrow \infty, y \rightarrow \infty$		$y = \sqrt[3]{x}$ Cube Root, Odd Domain: $(-\infty, \infty)$ Range: $(-\infty, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow -\infty$ $x \rightarrow \infty, y \rightarrow \infty$	
$y = b^x, b > 1$ Exponential, Neither Domain: $(-\infty, \infty)$ Range: $(0, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow 0$ $x \rightarrow \infty, y \rightarrow \infty$		$y = \log_b(x), b > 1$ Log, Neither Domain: $(0, \infty)$ Range: $(-\infty, \infty)$ End Behavior: $x \rightarrow 0^+, y \rightarrow -\infty$ $x \rightarrow \infty, y \rightarrow \infty$	
$y = \frac{1}{x}$ Rational (Inverse), Odd Domain: $(-\infty, 0) \cup (0, \infty)$ Range: $(-\infty, 0) \cup (0, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow 0$ $x \rightarrow \infty, y \rightarrow 0$		$y = \frac{1}{x^2}$ Rational (Inverse Squared), Even Domain: $(-\infty, 0) \cup (0, \infty)$ Range: $(0, \infty)$ End Behavior: $x \rightarrow -\infty, y \rightarrow 0$ $x \rightarrow \infty, y \rightarrow 0$	
$y = \text{int}(x) = [x]$ Greatest Integer, Neither Domain: $(-\infty, \infty)$ Range: $\{y : y \in \mathbb{Z}\}$ (integers) End Behavior: $x \rightarrow -\infty, y \rightarrow -\infty$ $x \rightarrow \infty, y \rightarrow \infty$		$y = C$ $(y = 2 \text{ in the graph})$ Constant, Even Domain: $(-\infty, \infty)$ Range: $\{y : y = C\}$ End Behavior: $x \rightarrow -\infty, y \rightarrow C$ $x \rightarrow \infty, y \rightarrow C$	