

Supply the graph of each of the following basic functions. State domain, range, symmetry, and intervals of increase and decrease.

1.  $f(x) = x$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

2.  $f(x) = x^2$  or  $(x^4, x^6, x^8, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

3.  $f(x) = |x|$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

4.  $f(x) = x^3$  or  $(x^5, x^7, x^9, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

5.  $f(x) = \sqrt{x} = x^{\frac{1}{2}}$  or  $(\sqrt[4]{x}, \sqrt[6]{x}, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

6.  $f(x) = \sqrt[3]{x} = x^{\frac{1}{3}}$  or  $(\sqrt[5]{x}, \sqrt[7]{x}, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

7.  $f(x) = \frac{1}{x} = x^{-1}$  or  $(\frac{1}{x^3}, \frac{1}{x^5}, \frac{1}{x^7}, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing

8.  $f(x) = \frac{1}{x^2} = x^{-2}$  or  $(\frac{1}{x^4}, \frac{1}{x^6}, \frac{1}{x^8}, \dots)$

- Domain
- Range
- Symmetry
- Increasing
- Decreasing