

2.2 Power functions

Express the following functions as a power function in exponential form analyze and also graph the functions by hand. **ONLY** use the calculator to **confirm** your graph.

1) $f(x) = \sqrt{x}$

2) $f(x) = \sqrt[6]{x^5}$

3) $f(x) = \sqrt[3]{x}$

4) $g(x) = \sqrt[3]{x^2}$

5) $g(x) = \sqrt[5]{x^9}$

6) $f(x) = \sqrt[3]{x^4}$

7) $f(x) = \sqrt[5]{x^2}$

8) $f(x) = \sqrt[8]{x^5}$

9) $f(x) = \sqrt[5]{x^3}$

10) $g(x) = \frac{1}{\sqrt{x}}$

11) $g(x) = \frac{1}{\sqrt[3]{x^4}}$

12) $g(x) = \frac{1}{\sqrt[5]{x^2}}$

13) $h(x) = \frac{1}{\sqrt[3]{x}}$

14) $k(x) = \frac{1}{\sqrt[3]{x^2}}$

15) $g(x) = \sqrt{|x-4|}$

16) $f(x) = \sqrt[3]{|x+3|}$