

## Functions and Graphing

### Domain and Range

Find the domain and range of the functions below.

1)  $f(x) = x^2 + 2x - 5$

2)  $y = \sqrt{x-2} + 5$

3)  $f(x) = \frac{x-2}{x-4}$

4)  $y = \sqrt{x^2+2} - 3$

5)  $f(x) = \frac{x^2+x-6}{-4x^2-16x-12}$

6)  $f(x) = -x^4 + x^3 + 2x^2$

7)  $f(x) = x^4 - 4x^3 + 2x^2 + x + 4$

8)  $f(x) = \frac{x-4}{-4x-16}$

9)  $y = \sqrt{x+1} - 4$

10)  $y = \sqrt[3]{x^2-1} - 1$

11)  $f(x) = x^3 + x^2 - x - 2$

12)  $f(x) = \frac{x^3 - 9x}{3x^2 - 6x - 9}$