

Advanced Math

1-3
(Day 1)

Functions and Their Graphs

function -

domain -

range -

Determine if the equation represents y as a function of x .

13) $x^2 + y^2 = 4$

15) $x^2 + y = 4$

When in doubt, _____!

Evaluate the function at the specified values of the independent variable and simplify.

29) $f(y) = 3 - \sqrt{y}$

a) $f(4) =$

b) $f(0.25) =$

c) $f(4x^2) =$

Evaluate the function at the specified values of the independent variable and simplify.

$$35) f(x) = \begin{cases} 2x + 1, & x < 0 \\ 2x + 2, & x \geq 0 \end{cases}$$

a) $f(-1) =$

b) $f(0) =$

c) $f(2) =$

Find all real values of x such that $f(x) = 0$.

$$45) f(x) = x^2 - 9$$

Find the domain of the function.

$$55) g(y) = \sqrt{y - 10}$$

$$59) g(x) = \frac{1}{x} - \frac{3}{x + 2}$$

Assignment:
pg 141
14-22 even,
26 - 38 even,
42 - 62 even