ate:

Day 8, Lesson 1.2.3) What is the function: I will understand the input/output nature of functions and be introduced to domain and range. 1-53 to 1-56

1-52)

x	-3	-2	-1	0	1	2	3
y	8	3	0	-1	0	3	8

rule:

function family:

1-53) $x = 3$ → inputs

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

→ $f(3) = 8$ outputs

a) find the output for $f(x) = x^2 - 1$ when input or $x = 4$. That is find $f(4)$.

b) find $f(-1)$ and $f(-10)$

c) if $f(x) = 24$, what is x?

1-54) find the relationship:

x	9	1	100	4	49		0	25	20
y					7	4		5	

$f(x) =$ _____

1-55) find corresponding inputs or outputs:

a) $x = -3$ find $f(-3)$ if $f(x) = -2x + 4$ b) $x = -2$ find $f(-2)$ if $f(x) = \sqrt{x+3}$

Date: Day 8, Lesson 1.2.3) continued.

1-55) continued

1-56) examine function.

Notice: $g(1) = -1$ (when $x = 1$, $f(x)/y = -1$)

a. find $g(2)$

b. $g(-1)$ and $g(0)$

c) find x when $g(x) = 1$.

Sketch