2.2 Re-Teach Worksheet

Intermediate Algebra

Name Key

Learning Target: I understand the meaning of function notation and can evaluate functions for a given input.

1. **Given:**

$f(x) = 2x - 8$ $g(x) = 2x^2 + 3x - 1$ $h(x) = x + 4$

Find:

a. h(-5) $x = -5$
$h(-5) = -5 + 4$
$= -1$

b. f(-1)
$f(-1) = 2(-1) - 8$
$= -10$

c. g(3) $= 2(3)^2 + 3(3) - 1$
$2(9) + 9 - 1$
$18 + 9 - 1 = 26$

d. h(0) + f(5)
$0 + 4 = 4$ $2(5) - 8 = 2$
$4 + 2 = 6$

e. Find x if h(x) = 14
$14 = x + 4$
$10 = x$

f. Find x if f(x) = -20
$-20 = 2x - 8$
$-12 = 2x$ $x = -6$

g. Compare the two expressions below as greater than, less than, or equal to. Show your work!

Options: >, <, =

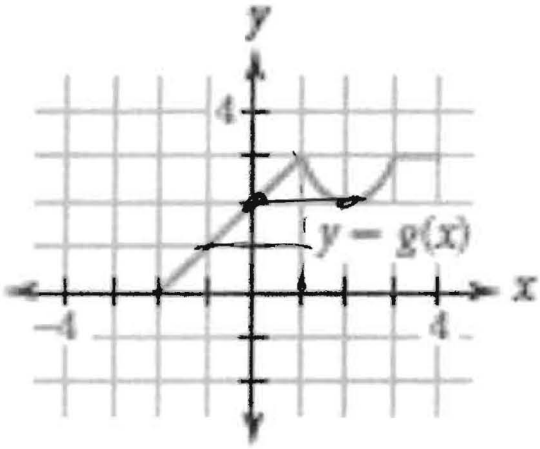
$g(2) = 2(2)^2 + 3(2) - 1$
$8 + 6 - 1 = 13$

13 > 1

g(2) ____ the value of x when h(x) = 5

$5 = x + 4$
$1 = x$

2. **Use the graph to find the following:**



a. g(1) $x = 1$ $y = 3$

b. g(-2) $x = -2$ $y = 0$

c. Find x when g(x) = 1
$y = 1$
$x = -1$

d. Find all values of x that make g(x) = 2
$y = 2$
$x = 0$ + $x = 2$

3.

x	f(x)
-3	4
-2	–1
7	3
0	2

a. Find f(-3)
$x = -3$
$y = 4$

b. What is x when f(x) = 2
$y = 2$
$x = 0$