

Unit 2 Day 6 Classwork

Name: _____

Part 1: Function Notation - Equations

Let $f(x) = -3x + 1$ and $g(x) = 10x - 4$. Find the indicated value.

a) $f(x)$ when $x = -1$

$$-3(-1) + 1$$

$$3 + 1 = \boxed{4}$$

b) $g(x)$ when $x = 5$

$$10(5) - 4$$

$$50 - 4 = \boxed{46}$$

c) x when $f(x) = -17$

~~$10x - 4 = -17$~~
 ~~$10x = -13$~~
 ~~$x = -1.3$~~

$$-17 = -3x + 1$$

$$-18 = -3x$$

$$x = \boxed{6}$$

d) x when $g(x) = 31$

$$31 = 10x - 4$$

$$+4 \quad +4$$

$$35 = 10x$$

$$x = \boxed{3.5}$$

e) $f(-20)$

$$-3(-20) + 1$$

$$60 + 1 = \boxed{61}$$

f) $f(4) + g(-3)$

$$-3(4) + 1 + 10(-3)$$

$$-12 + 1 - 30 - 4$$

$$-11 - 45 = \boxed{-56}$$

Part 2: Function Notation - Graphs

Given the functions $f(x)$ and $g(x)$, answer the following questions.

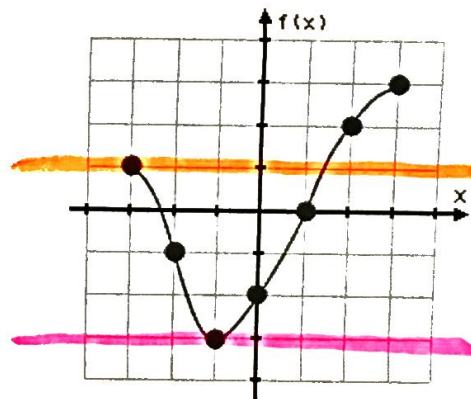
a) $f(1) = 0$

b) $f(3) = 3$

c) $f(-2) = -1$

d) x when $f(x) = -3$ $x = -1$

e) x when $f(x) = 1$ $x = -3$ and $x = 1.5$



f) $g(0) = 2$

g) $g(-3) = -2$

h) $g(2) = -3$

i) x when $g(x) = 3$ $x = -1$

j) x when $g(x) = -1$ (More than one answer! Estimate!)

$x =$ -2.1 1 2.8

