

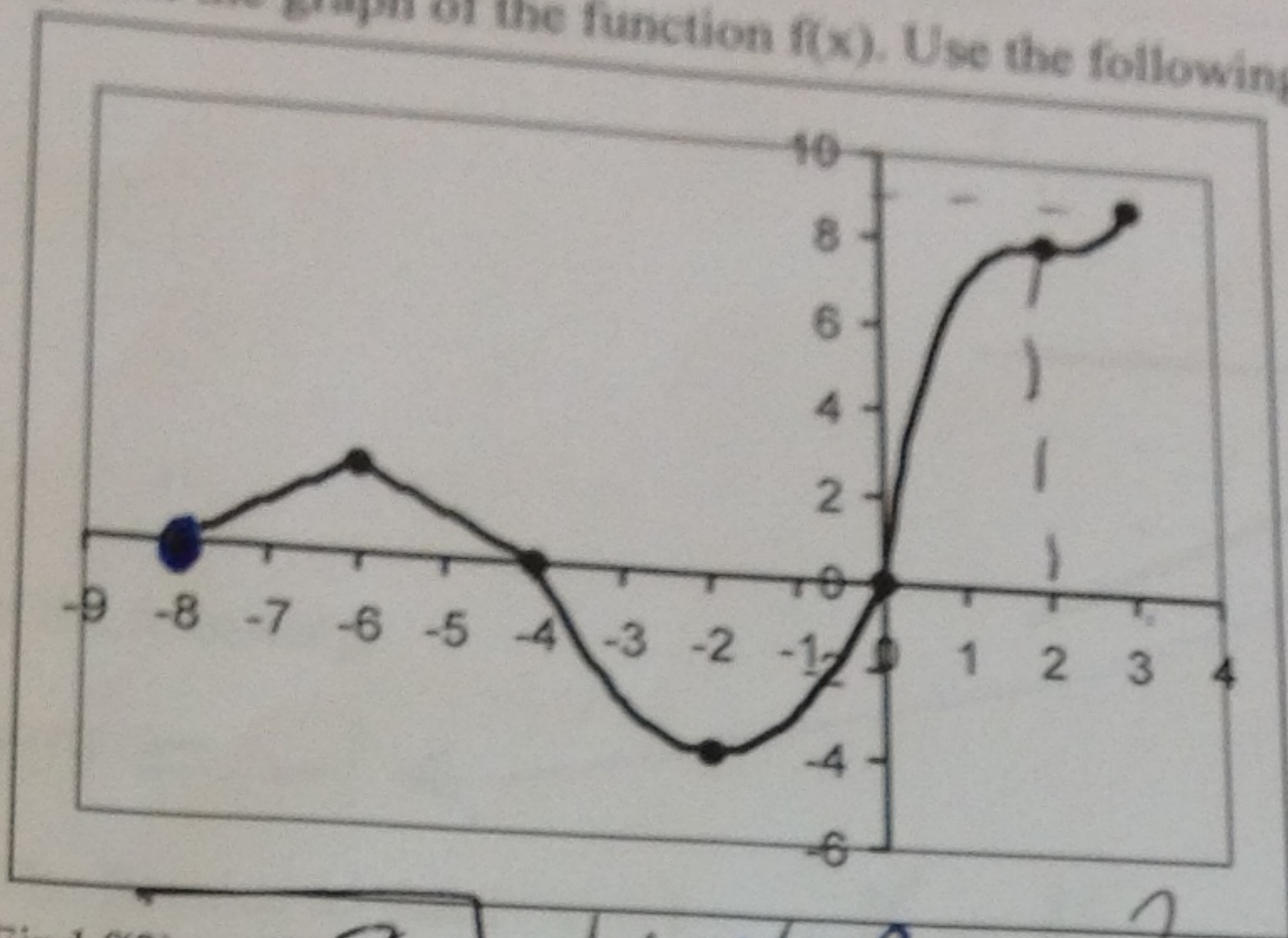
NAME _____

Solutions

SCORE: _____ / 20

*** RETAIN ALL GRADED PAPERS FOR YOUR RECORDS ***

1) You are given the graph of the function $f(x)$. Use the following graph to answer the questions given below.



a)

Find $f(2) = 8$ when $x=2, y=?$

(5 Points)

b)

Find x when $f(x) = -4$ $x = -2$

c)

What is the y -intercept? Write as an ordered pair. $(0, 0)$

d)

What are the x -intercepts? Write as ordered pairs. $(-8, 0)$ $(-4, 0)$ $(0, 0)$

e)

What is the domain of f ? Write in interval notation $[-8, 3]$

Write the domain in set builder notation $\{x \mid -8 \leq x \leq 3\}$

f)

What is the range of f ? Write in interval notation $[-4, 9]$

Write the range in set builder notation $\{y \mid -4 \leq y \leq 9\}$

g)

For what values of x is $f(x) = 0$?
 $x = -8, x = -4, x = 0$

h)

Solve the equation $f(x) = 9$
 $x = 3$

What are the zeros of the function?

$x = -8, x = -4, x = 0$

- 2) The sum of two numbers is 91. One of the numbers is 9 more than the other, What are the numbers?

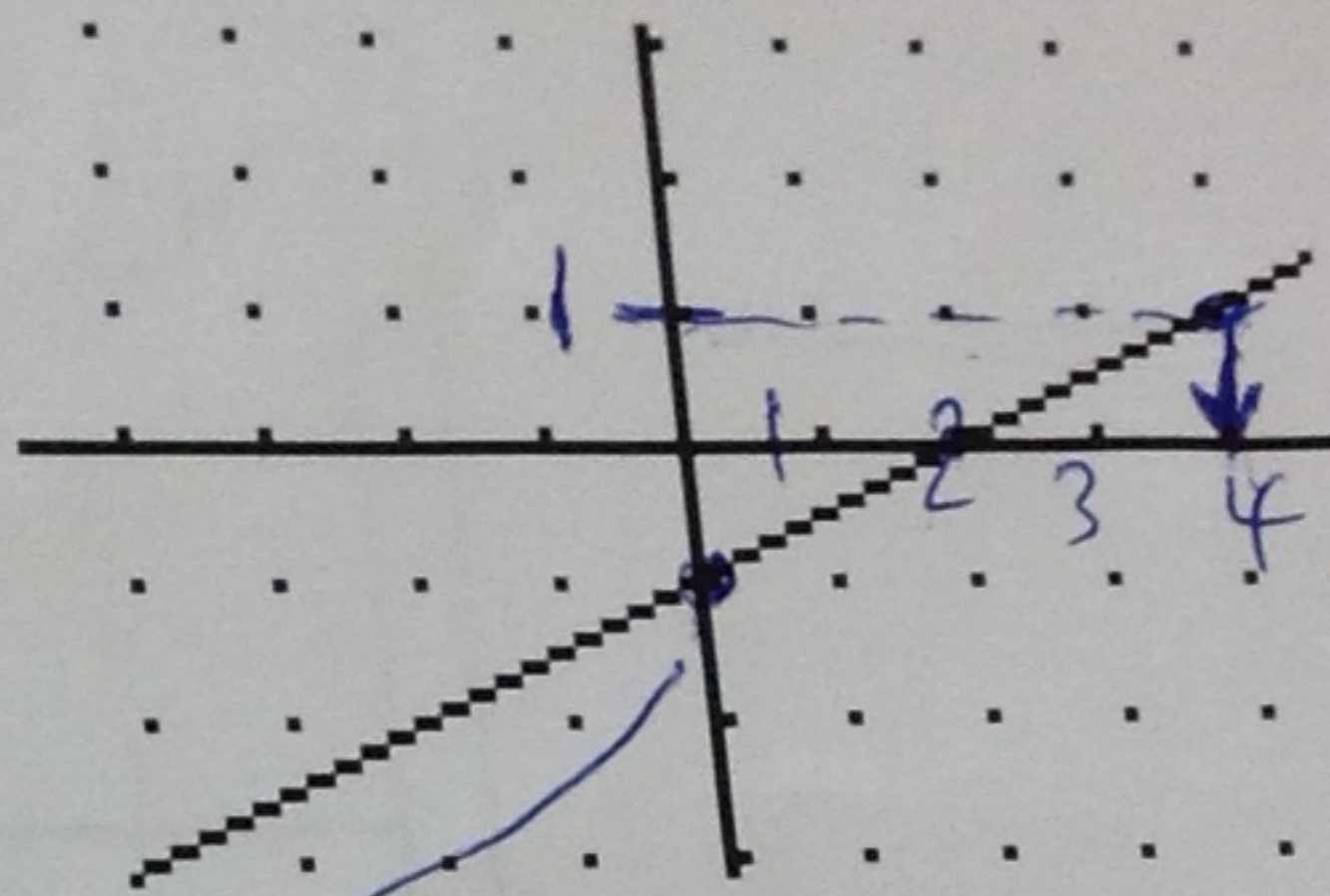
(4 points)

$$X + X + 9 = 91$$

$$2X + 9 = 91$$

$$2X = 82 \quad X = 41 \quad \text{the other number is } 50$$

- 3) Given the Graph of F(X)



(4 points)

Estimate the following:

a) $F(0) = -1$ ←

b) The X value so that $F(X) = 1$

$X = 4$

c) Find the x-intercept of F(X), please write your answer in the ordered pair form $(2, 0)$

d) Find the y-intercept of F(X), please write your answer in the ordered pair form $(0, -1)$

- 4) Let $f(x) = -5x - 8$ (Must Show Procedure)

(2 points)

a. Find $f(-1)$

$$= -5(-1) - 8$$

$$= 5 - 8 = -3$$

b. Find the y-intercept of

$$f(x) = -5x - 8$$

$$(0, -8)$$

- 6) Let $g(x) = -3x + 9$

(5 points)

a. Find $g(-5)$

$$= -3(-5) + 9 = 15 + 9 = 24$$

b. Find the x-intercept of $g(x)$

$$-3x + 9 = 0 \quad x = 3$$

c. Find x when $g(x) = 14$

$$14 = -3x + 9$$

$$-9 = -3x$$

$$x = \frac{-5}{3}$$

d. Find $g(a+1)$

$$= -3(a+1) + 9 = -3a - 3 + 9$$

$$= -3a + 6$$

f. Find $g(a) - 1$

$$= -3a + 9 - 1 = -3a + 8$$

MA099

Dr. KATIRAIE

QUIZ #2 Form B

SECTIONS (1.6, 1.7, and 2.1) Summer 2014

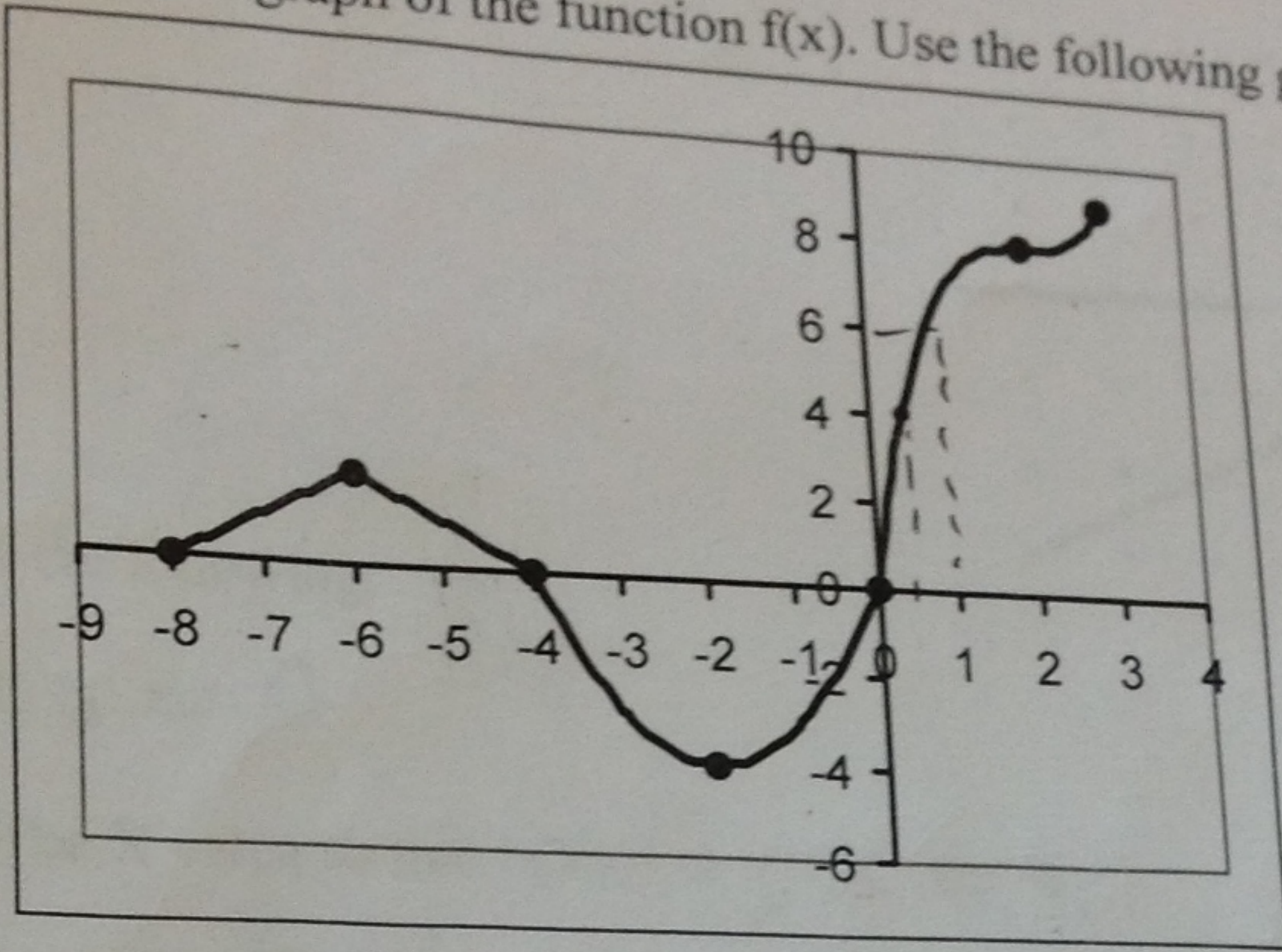
NAME

Solutions

SCORE: / 20

*** RETAIN ALL GRADED PAPERS FOR YOUR RECORDS ***

1) You are given the graph of the function $f(x)$. Use the following graph to answer the questions given below.



- a) Find $f(-4) = 0$
- b) Find x when $f(x) = 4$ $x = 0.5$
- c) What is the y-intercept? Write as an ordered pair. $(0, 0)$
- d) What are the x-intercepts? Write as ordered pairs. $(-8, 0)$ $(-4, 0)$ $(0, 0)$
- e) What is the domain of f ? Write in interval notation $[-8, 3]$
Write the domain in set builder notation $\{x \mid -8 \leq x \leq 3\}$
- f) What is the range of f ? Write in interval notation $[-4, 9]$
Write the range in set builder notation $\{y \mid -4 \leq y \leq 9\}$
- g) For what values of x is $f(x) = 0$?
 $x = -8, x = -4, x = 0$
- h) Solve the equation $f(x) = 6$
 $x = 1$
- What are the zeros of the function?
 $x = -8, x = -4, x = 0$

*QUIZ 2
FORM B*

The sum of two numbers is 25. One of the numbers is 5 more than the other,
 What are the numbers?

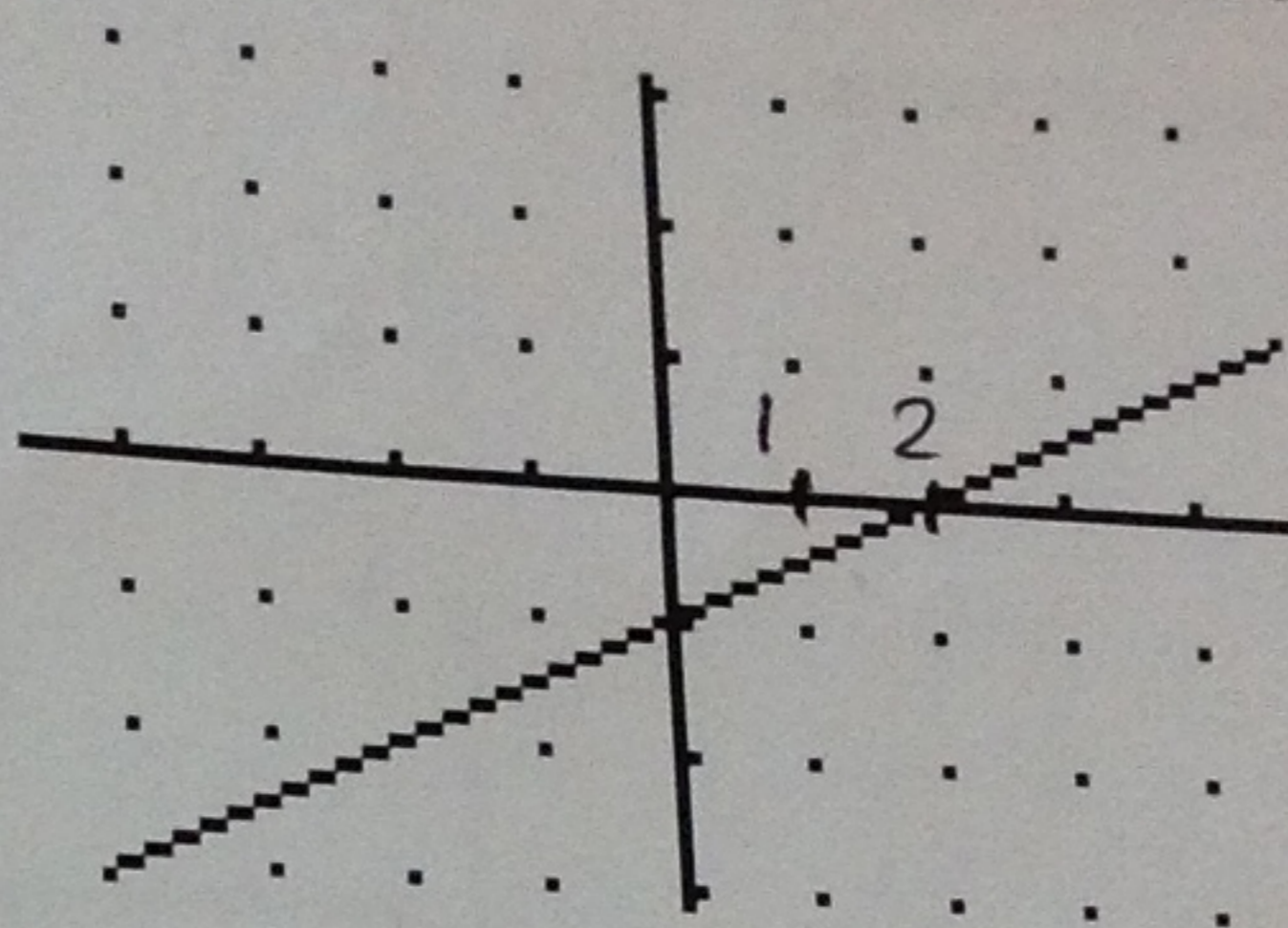
(4 points)

$$X + X + 5 = 25$$

$$2X + 5 = 25$$

$$2X = 20$$

3) Given the Graph of F(X) X = 10 and the other number is 15



Estimate the following:

(4 points)

a) $F(2) = 0$

b) The X value so that $F(X) = -1$; $X = 0$

c) Find the x-intercept of F(X), please write your answer in the ordered pair form $(2, 0)$

d) Find the y-intercept of F(X), please write your answer in the ordered pair form $(0, -1)$

4) Let $f(x) = -6x - 7$ (Must Show Procedure) (2 points)

<p>a. Find $f(-1)$</p> $f(-1) = -6(-1) - 7$ $= 6 - 7 = -1$	<p>b. Find the y-intercept of $f(x) = -6x - 7$</p> $(0, -7)$ $f(0) = -6(0) - 7 = -7$
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6) Let $g(x) = -5x + 20$ (5 points)

<p>a. Find $g(-2)$</p> $g(-2) = -5(-2) + 20 = 30$	<p>b. Find the x-intercept of $g(x)$</p> $-5x + 20 = 0$ $x = 4$ $(4, 0)$
<p>c. Find x when $g(x) = 25$</p> $25 = -5x + 20$ $-5x = 5$ $x = -1$	<p>d. Find $g(a+1)$</p> $-5(a+1) + 20 = -5a - 5 + 20$ $= -5a + 15$
<p>f. Find $g(a) - 1$</p> $= -5a + 20 - 1$ $= -5a + 19$	