

MONTGOMERY COLLEGE  
Department of Mathematics  
Rockville Campus

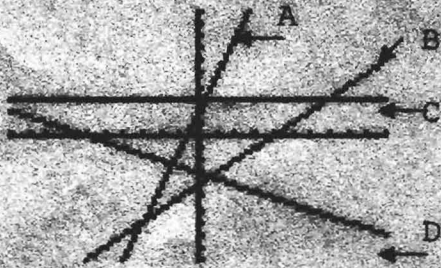
MA 103 KATIRAIIE QUIZ #2 Form A SECTIONS (2.1, 2.2, 2.3) Spring 2007

NAME Solution

SCORE: 7/20

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1. For the lines sketched below, state whether the slope of the line is positive, negative or zero in the blank provided.



Slope of line A is +

Slope of line B is +

Slope of line C is ZERO

Slope of line D is NEGATIVE

2. Write the Slope - intercept form for the line passing through the points  $(-10, -9)$  and  $(-12, -15)$ .

$$m = \frac{-15 - (-9)}{-12 - (-10)} = \frac{-15 + 9}{-12 + 10} = \frac{-6}{-2} = 3$$

$$y = mx + b$$

$$-9 = 3(-10) + b$$

$$-9 = -30 + b \Rightarrow b = 21$$

$$y = 3x + 21$$

3. Write a single linear equation in  $y = mx + b$  form with all of the following properties:

- has a negative slope,
- has a positive y-intercept, and
- would be considered a steep line.

$$y = -50x + 100$$

4. For the relations described below, mark F if the relations is a function and N if it is not.

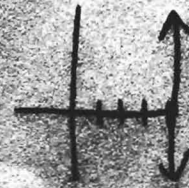
A.  $y = 4x - 3y + 8$

$+3y \quad +3y$   
 $\hline y = 4x + 8$   
 $y = x + 2$

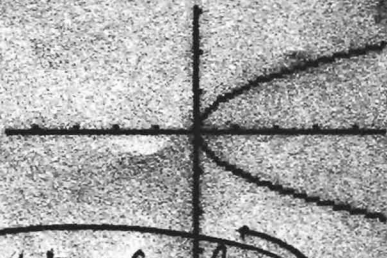
Function

B.  $x + 5 = 9$

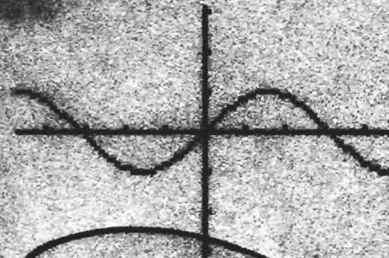
$x = 4$   
 N



C.



Not a function



Function

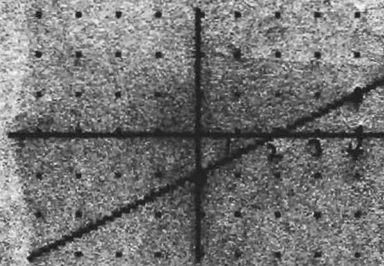
5. Write the Slope - intercept form for a line passing through the points

X	-3	0	3	6
F(x)	2	4	6	8

$m = \frac{4-2}{0-(-3)} = \frac{2}{3}$

Intercept is (0, 4)

$y = \frac{2}{3}x + 4$



6. Given the Graph of F(x)

Estimate the following:

a)  $F(4) = 1$

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

$x = 0$

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MA 103 KATIRAIE QUIZ #2 Form B SECTIONS (2.1, 2.2, 2.3) Spring 2007

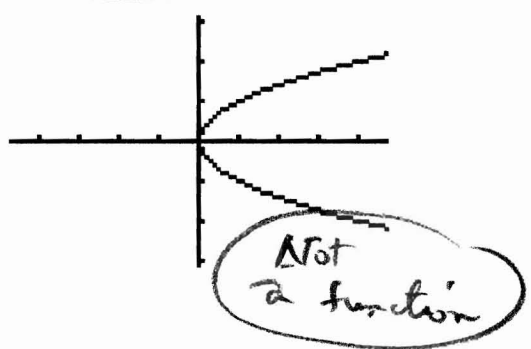
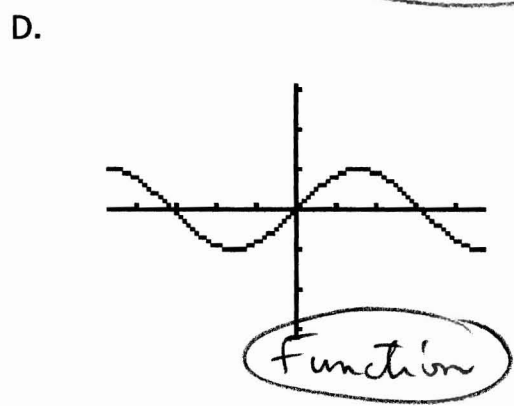
NAME \_\_\_\_\_ SCORE: \_\_\_\_ / 20  
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1. For the relations described below,  
mark **F** if the relations is a **function** and **N** if it is **not**.

A.  $y = 4x - 3y + 8$   
 $+3y \quad +3y$  **Function**

B.  $x + 5 = 9$   
 $x = 4$  **Not a function**

C.  $4y = 4x + 8$   
 $y = x + 2$



2. Write the Slope - intercept form for a line passing through the points (-10, -9) and (-12, -15).

$$m = \frac{-15 - -9}{-12 - -10} = \frac{-6}{-2} = 3$$

$y = mx + b$   
 $-9 = 3(-10) + b$   
 $-9 = -30 + b \Rightarrow b = 21$

**$y = 3x + 21$**

3. Write a single linear equation in  $y = mx + b$  form with **all of the following properties:**

- a. has a negative slope,
- b. has a positive y-intercept, and
- c. would be considered a steep line.

**$y = -50x + 100$**

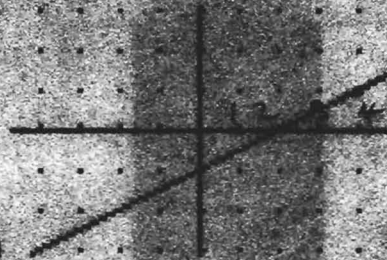
4. Write the Slope - intercept form for a line passing through the points

X	-3	0	3	6
F(x)	2	4	6	8

$$m = \frac{4-2}{0-(-3)} = \frac{2}{3}$$

y-intercept is (0,4)

$$y = \frac{2}{3}x + 4$$



5. Given the Graph of F(x)

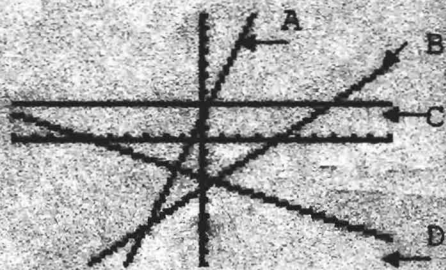
Estimate the following:

a)  $F(4) = 1$

b) The X value so that F(x) = -1

$x = 0$

6. For the lines sketched below, state whether the slope of the line is positive, negative or zero in the blank provided.



Slope of line A is Positive

Slope of line B is Positive

Slope of line C is Zero

Slope of line D is Negative