

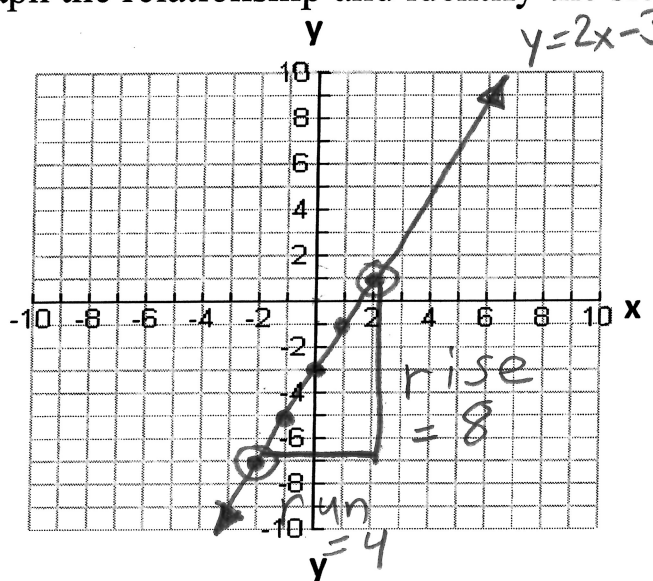
## Determining slope (m) and y-intercept (b) from Linear Relations

Complete each table of values, graph the relationship and identify the slope and y-intercept:

a)  $y = 2x - 3$

x	y
-2	-7
-1	-5
0	-3
1	-1
2	1

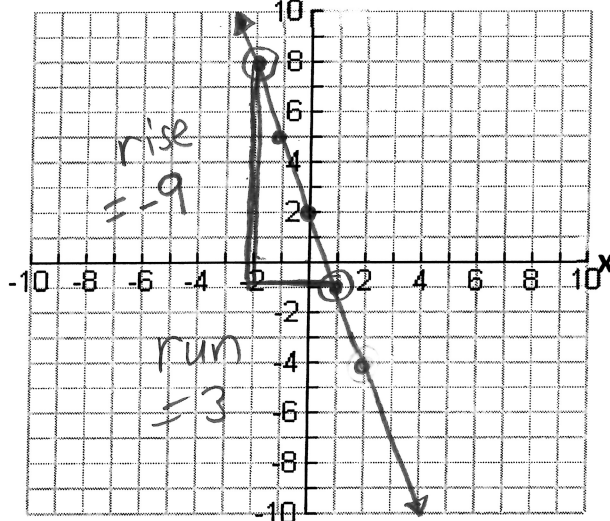
Handwritten calculations:  
 $y = 2(-2) - 3 = -4 - 3 = -7$   
 $y = 2(-1) - 3 = -2 - 3 = -5$   
 $y = 2(1) - 3 = 2 - 3 = -1$   
 $y = 2(2) - 3 = 4 - 3 = 1$



slope =  $\frac{\text{rise}}{\text{run}} = \frac{8}{4} = 2$   
 y-int =  $-3$

b)  $y = -3x + 2$

x	y
-2	8
-1	5
0	2
1	-1
2	-4

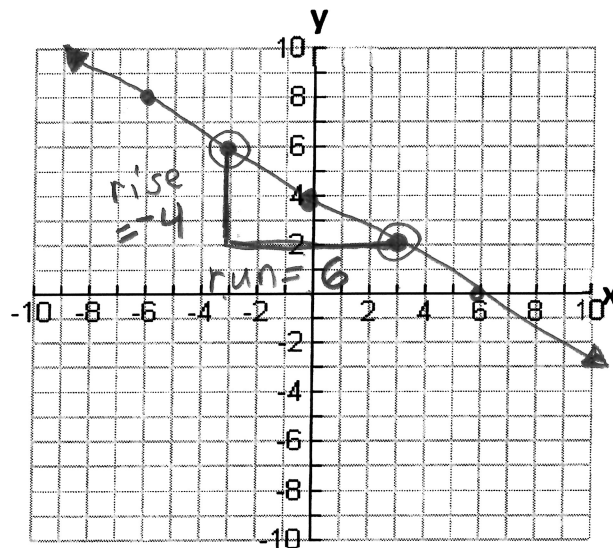


slope =  $\frac{\text{rise}}{\text{run}} = \frac{-9}{3} = -3$   
 y-int =  $2$

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

x	y
-6	8
-3	6
0	4
3	2
6	0

Handwritten calculation:  
 $y = -\frac{2}{3}(-6) + 4 = \frac{12}{3} + 4 = 4 + 4 = 8$

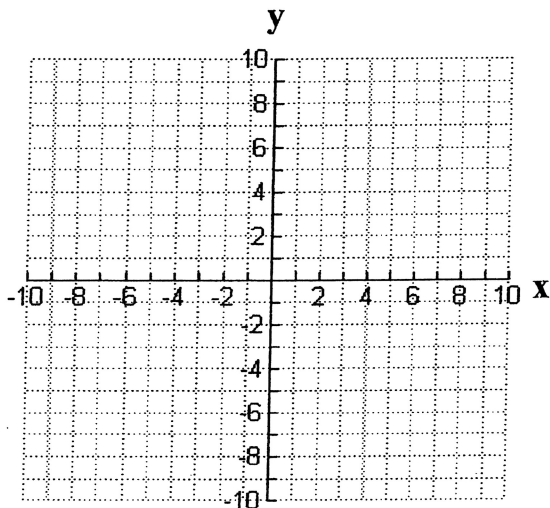


slope =  $\frac{\text{rise}}{\text{run}} = \frac{-4}{6} = -\frac{2}{3}$   
 y-int =  $4$

## Graphing Homework (Complete t.o.v, graph line, and determine m and b)

a)  $y = 2x + 2$

x	y
-2	
-1	
0	
1	
2	

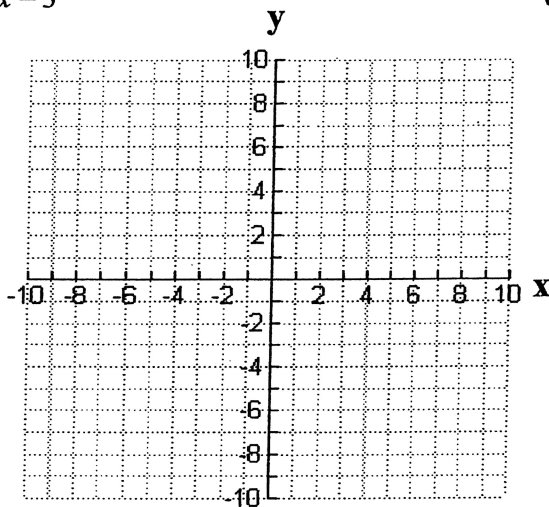


m =

b =

c)  $y = \frac{1}{2}x - 3$

x	y
-4	
-2	
0	
2	
4	

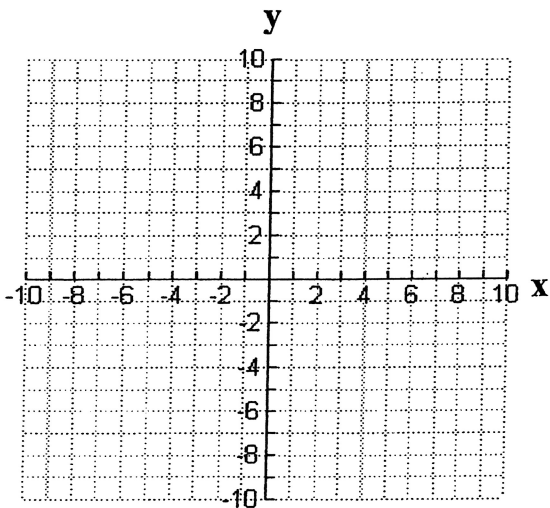


m =

b =

e)  $y = 0x - 7$

x	y
-2	
-1	
0	
1	
2	

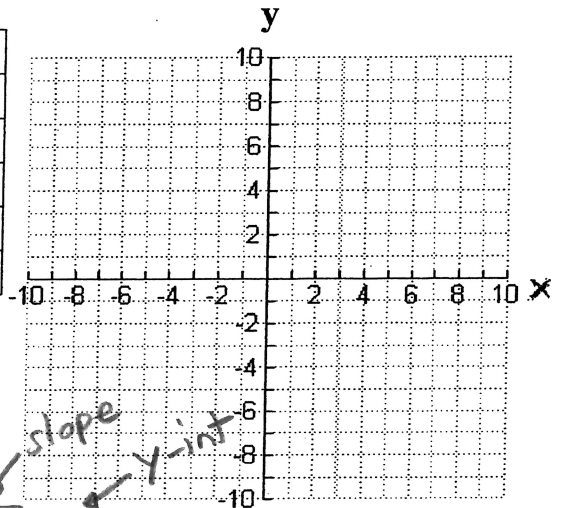


m =

b =

b)  $y = -3x + 3$

x	y
-2	
-1	
0	
1	
2	

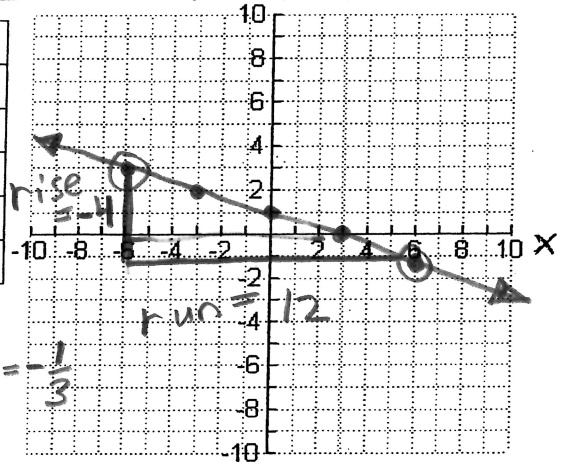


m =

b =

d)  $y = \frac{1}{3}x + 1$   $-\frac{1}{3}(-6) + 1 = \frac{6}{3} + 1 = 3$

x	y
-6	3
-3	2
0	1
3	0
6	-1



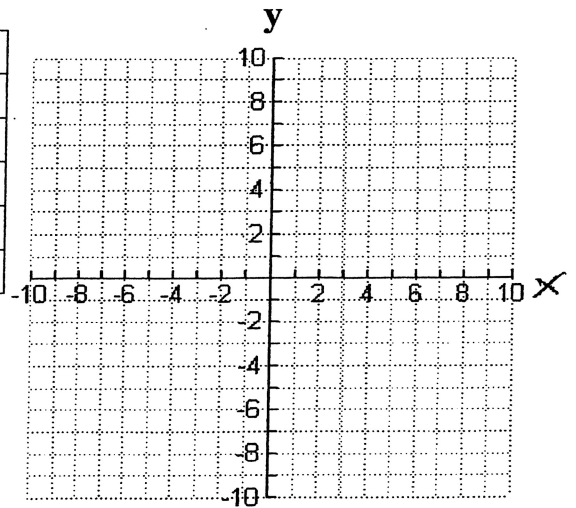
slope  $m = \frac{-4}{12} = -\frac{1}{3}$

b = 1

y-int

f)  $y = 2x$

x	y
-2	
-1	
0	
1	
2	



m =

b =