Reteaching 8-4 Writing Rules for Linear Functions

Write a rule for the function.

x	$f(x)$
-2	-12
0	-2
2	8
4	18

As the x values increase by 2, the $f(x)$ values increase by 10. So $m = \frac{10}{2} = 5$. When $x = 0$, $f(x) = -2$. So $b = -2$. Substitute $m = 5$ and $b = -2$ into $f(x) = mx + b$.

$f(x) = 5x + (-2)$
$f(x) = 5x - 2$

Write a rule for each function.

1. _____

x	$f(x)$
-1	-7
0	0
1	7
2	14

2. _____

x	$f(x)$
-9	-17
0	-8
9	1
18	10

3. _____

x	$f(x)$
0	9
2	5
4	1
6	-3

4. _____

x	$f(x)$
-6	7
-3	8
0	9
3	10

5. _____

x	$f(x)$
-4	-6
0	-7
4	-8
8	-9

6. _____

x	$f(x)$
-12	-83
-6	-47
0	-11
6	25

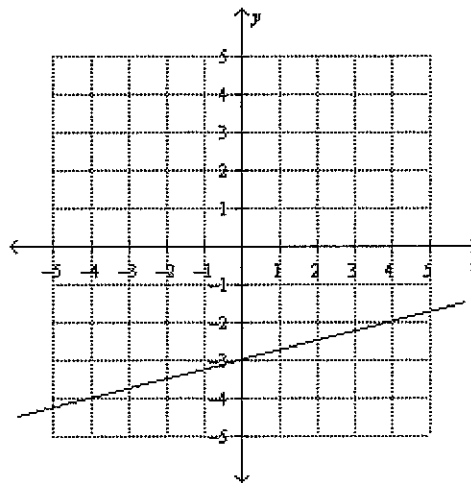# Writing Equations from Graphs

1.

Slope = _____

y-intercept = _____
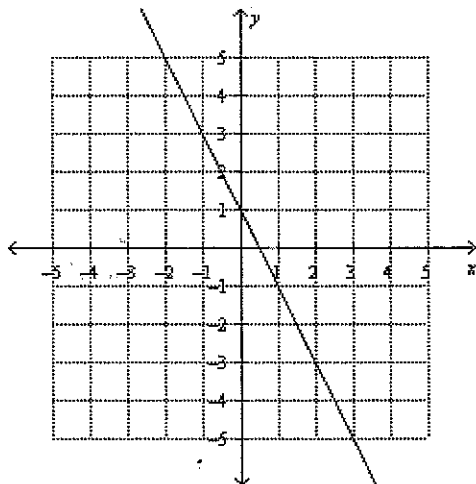
Equation = _____

2.

Slope = _____

y-intercept = _____
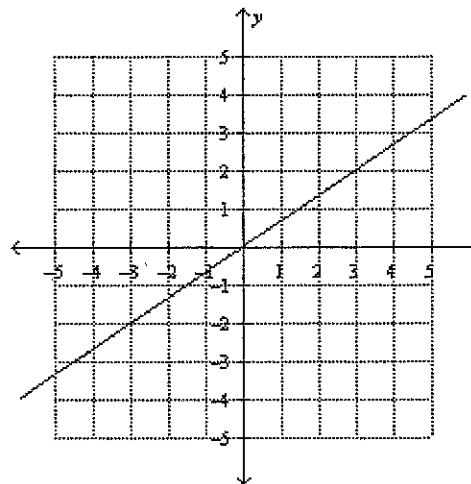
Equation = _____

3.

Slope = _____

y-intercept = _____
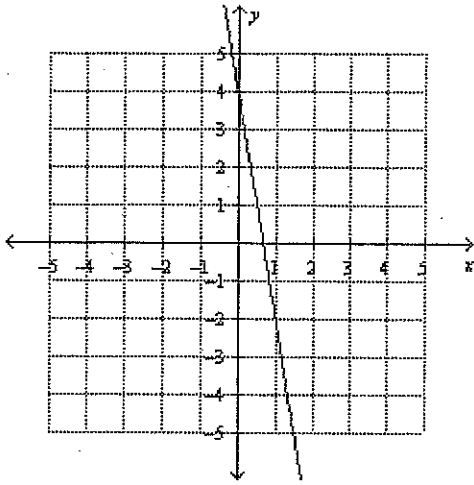
Equation = _____

4.

Slope = _____
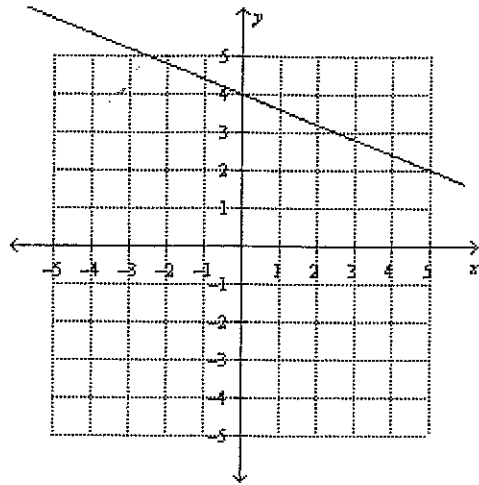
y-intercept = _____

Equation = _____

5.

Slope = _____

y-intercept = _____

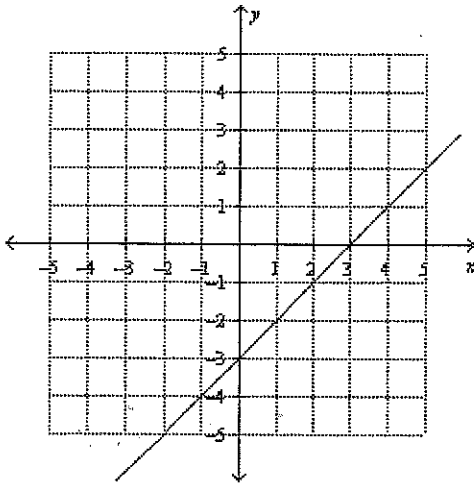Equation = _____

6.

Slope = _____

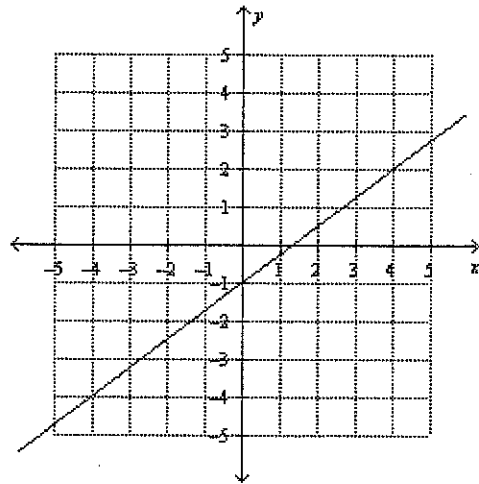y-intercept = _____

Equation = _____

7.

Slope = _____

y-intercept = _____

Equation = _____

8.

Slope = _____

y-intercept = _____

Equation = _____