

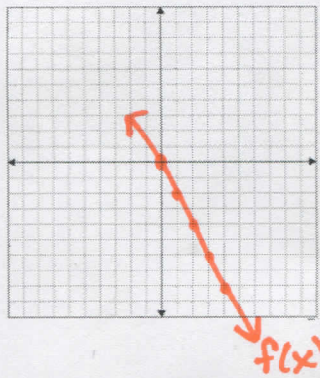
8.1 Graphing & Writing Linear Functions DAY ONE CYU

Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

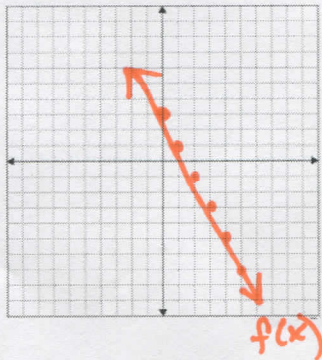
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Graphing lines	1, 2	3	4
Writing equations given m & b	5 - 8		
Writing equations given m & (x, y)	9 - 12		
Writing equations given two points			13 - 16
Slope formula	13 - 16		
Slope-intercept form	5 - 8		
Point-slope form	9 - 12	13 - 16	

Graph each linear function.

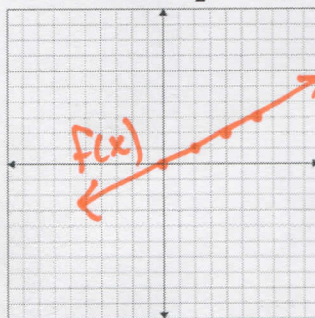
1. $f(x) = -2x$



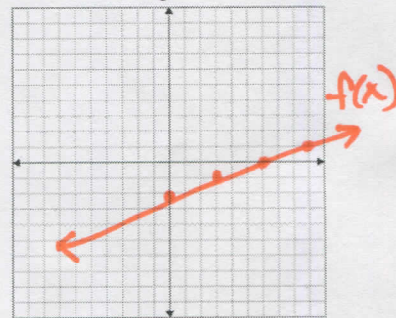
2. $f(x) = -2x + 3$



3. $f(x) = \frac{1}{2}x$



4. $f(x) = \frac{1}{3}x - 2$



Use the function notation to write the equation of the line with the given slope and y-intercept.

5. slope: -1 & y-intercept: (0, 1)

$f(x) = -x + 1$

6. slope: $\frac{1}{2}$ & y-intercept: (0, -6)

$g(x) = \frac{1}{2}x - 6$

7. slope: -3 & y-intercept: $(0, \frac{3}{4})$

$h(x) = -3x + \frac{3}{4}$

8. slope: $\frac{2}{7}$ & y-intercept: (0, 0)

$j(x) = \frac{2}{7}x$

Find an equation of the line with the given slope and containing the given point. Write the equation using function notation.

9. slope: 3 & through (1, 2)

$$m(x) = 3x - 1$$

10. slope: 4 & through (5, 1)

$$n(x) = 4x - 19$$

11. slope: -2 & through (1, -3)

$$d(x) = -2x - 1$$

12. slope: -4 & through (2, -4)

$$c(x) = -4x + 4$$

Find an equation of the line passing through the given points. Use function notation to write the equation.

13. (2, 0) & (4, 6)

$$f(x) = 3x - 6$$

14. (3, 0) & (7, 8)

$$g(x) = 2x - 6$$

15. (-2, 5) & (-6, 13)

$$p(x) = -2x + 1$$

16. (7, -4) & (2, 6)

$$q(x) = -2x + 10$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

