

MATH



Graphing Linear Equations

1. What is the slope-intercept form of the line represented in the table shown?

X	Y
-2	14
-1	12
0	10
1	8
2	6
3	4

Step 1: Find the y-intercept:

Step 2: Choose any two points from the table to find the slope:

Step 3: Use the newly-found slope to write the slope-intercept equation. The form for that is $y = mx + b$.

Step 4: Check your work. Choose an ordered pair from the table and substitute into the newly-found equation.

2. Use the slope and y-intercept to graph the equation $y = -\frac{2}{3}x + 5$

Step 1	Plot the ordered pair that represents the y-intercept.	
Step 2	Use the slope of the line to find another ordered pair that lies on the line by counting.	
Step 3	Connect the ordered pairs using a straightedge.	
Step 4	Check the coordinates of your second ordered pair by substituting them into the line's equation to make sure they are on the line you are trying to graph.	

3. Rewrite the equation shown in slope-intercept form. Identify the slope of the equation, the x-intercept and the y-intercept. Then graph the equation. Make sure to show all your work in the spaces provided.

$y - (-7) = 3(x - (-4))$	
Slope-intercept form:	
Slope:	
y-intercept:	
x-intercept:	
Graph:	