X

2

y

8

Date _____

WRITE EQUATIONS IN SLOPE-INTERCEPT FORM: TABLES

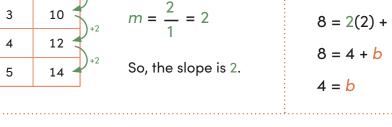
When the values in a table change at a constant rate, the table shows a linear function. You can also show a linear function using an equation in slope-intercept form: y = mx + bIn slope-intercept form, *m* is the slope and *b* is the *y*-intercept. The *y*-intercept is

Write an equation in slope-intercept form for the linear function in the table below.

the value of y where the line crosses the y-axis, or the value of y when x = 0.

First, find the slope. Find the change in *y* and change in *x* for each row of the table. Then, divide.

Next, find the y-intercept. If the table includes x = 0, the corresponding y-value is the y-intercept. Otherwise, you will need to solve y = mx + b for the y-intercept:



 $m = \frac{\text{change in } y}{\text{change in } x}$

y = mx + by = 2x + bPlug in the slope you found, 2, for m.8 = 2(2) + bPlug in the x- and y-values from a row in
the table. Let's use x = 2 and y = 8.8 = 4 + bSimplify. Then solve for b.4 = bSo, the y-intercept is 4.

Last, write the equation in slope-intercept form: y = 2x + 4.

Practice! Each table represents a linear function. Find each slope and y-intercept. Then write an equation for each function in slope-intercept form.

	x	у
	0	12
	1	15
	2	18
	3	21
slope:	y-	-intercep
equation:		

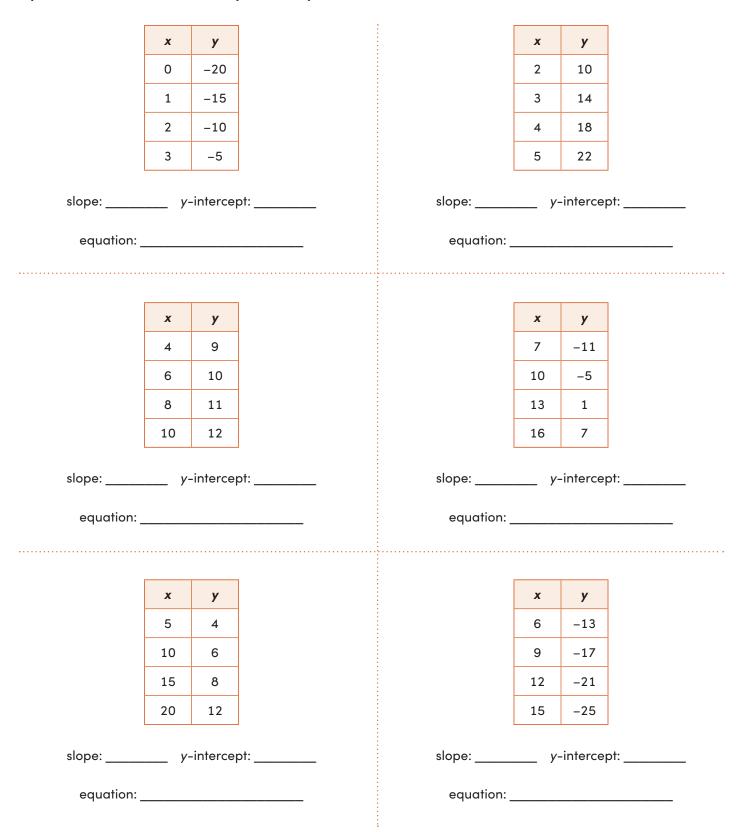
	x	у				
	0	8				
	1	7				
	2	6				
	3	5				
slope: y-intercept:						

equation: _____

Page 1

WRITE EQUATIONS IN SLOPE-INTERCEPT FORM: TABLES

Keep going! Each table represents a linear function. Find each slope and y-intercept. Then write an equation for each function in slope-intercept form.



© ThuVienTiengAnh.Com