

# GRAPHING LINEAR EQUATIONS WORKSHEET: Name: \_\_\_\_\_

Pre-ALGEBRA

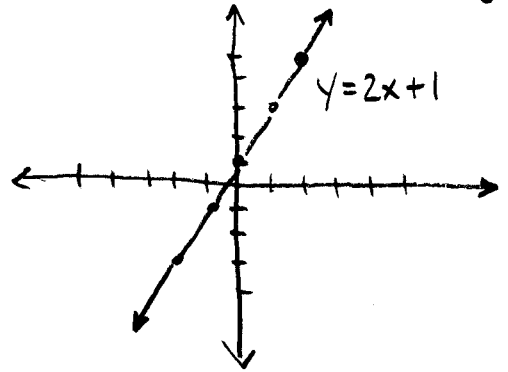
Per. \_\_\_\_\_ DATE: \_\_\_\_\_

GIVEN AN EQUATION OF A LINE, for example  $y = 2x + 1$ , first CONSTRUCT A table of values for  $x$  and  $y$ . Pick five values for  $x$ , for example  $-2, -1, 0, 1, 2$ . One at a time, substitute these into the equation to "build" a table of values:

<u>X</u>	<u><math>y = 2x + 1</math></u>	<u>Y</u>	<u>(X, Y)</u>
-2	$y = 2(-2) + 1$	-3	$(-2, -3)$
-1	$y = 2(-1) + 1$	-1	$(-1, -1)$
0	$y = 2(0) + 1$	1	$(0, 1)$
1	$y = 2(1) + 1$	3	$(1, 3)$
2	$y = 2(2) + 1$	5	$(2, 5)$

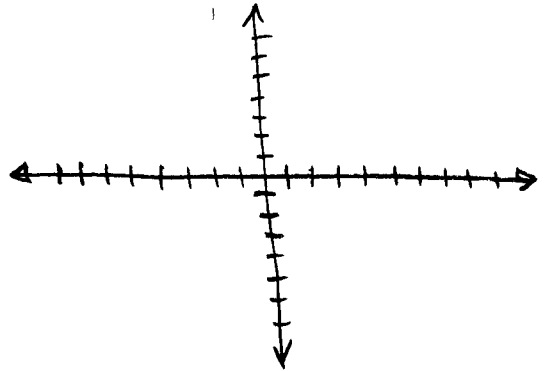
Now you have a set of  $(x, y)$  ordered pairs to plot

GRAPH THESE 5 POINTS & CONNECT WITH LINE, LABEL GRAPH



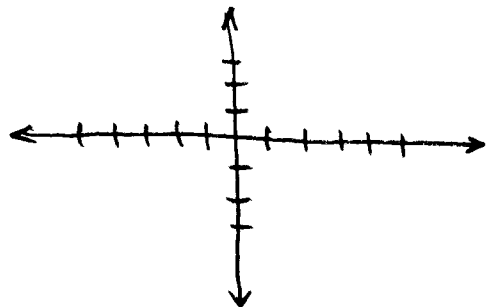
① GRAPH  $y = 3x - 2$

<u>X</u>	<u><math>y = 3x - 2</math></u>	<u>Y</u>	<u>(X, Y)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



② GRAPH  $y = x$

<u>X</u>	<u><math>y = x</math></u>	<u>Y</u>	<u>(X, Y)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



③ Find the slope of the line in #①      slope = \_\_\_\_\_

④ Find the slope of the line in #②      slope = \_\_\_\_\_