NAME _____ DATE _____ PERIOD ____

4-5 Study Guide and Intervention *(continued)*

Graphing Linear Equations

Graph Linear Equations The graph of a linear equation is a line. The line represents all solutions to the linear equation. Also, every ordered pair on this line satisfies the equation.

Example **Graph the equation $y - 2x = 1$.**

Solve the equation for y.

$y - 2x = 1$ Original equation

$y - 2x + 2x = 1 + 2x$ Add $2x$ to each side.

$y = 2x + 1$ Simplify.

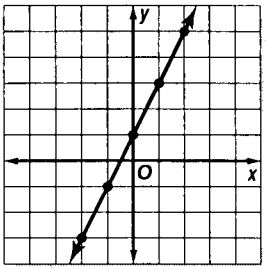
* Solve for y, if needed, plus T-Table on loose leaf.

Select five values for the domain and make a table. Then graph the ordered pairs and draw a line through the points.

x	$2x + 1$	y	(x, y)
-2	$2(-2) + 1$	-3	$(-2, -3)$
-1	$2(-1) + 1$	-1	$(-1, -1)$
0	$2(0) + 1$	1	$(0, 1)$
1	$2(1) + 1$	3	$(1, 3)$
2	$2(2) + 1$	5	$(2, 5)$

* GRAPHS ON THIS SHEET!!!

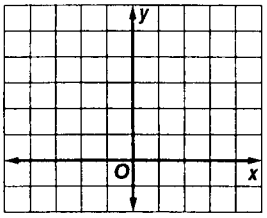
$y = 2x + 1$



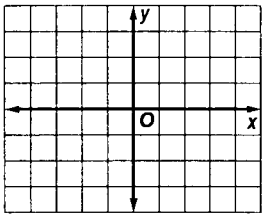
Exercises

Graph each equation.

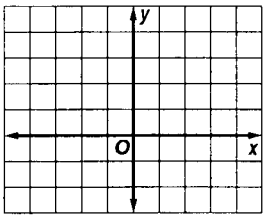
1. $y = 4$



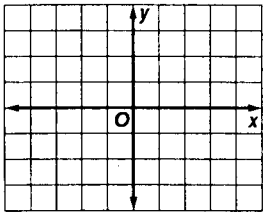
2. $y = 2x$



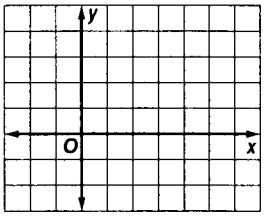
3. $x - y = -1$



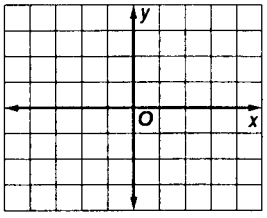
4. $3x + 2y = 6$



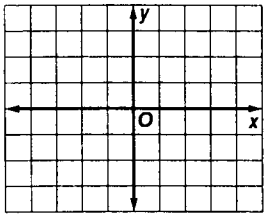
5. $x + 2y = 4$



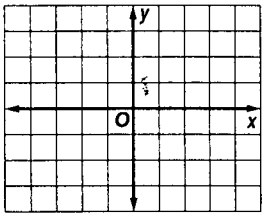
6. $2x + y = -2$



7. $3x - 6y = -3$



8. $-2x + y = -2$



9. $\frac{1}{4}x + \frac{3}{4}y = 6$ BONUS Problem