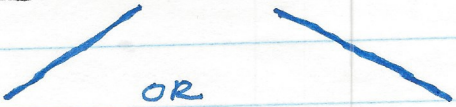
Unit 4 - Matching Graphs and Equation

The Bases of what we need:

EQUATION	GRAPHS
- If y and x	Diagonal : 
- If x = something	Vertical line :
- If y = something	Horizontal line :

You already know all you need to know, so follow these steps:

1 - Look at the graphs:

- If diagonal → your equation has 2 variables (x and y)
- If vertical → it is x = something
  - Look at what place the line is. As in, for example, the lines is at x = 3.
  - that is your equation.

(You don't have to do a table of values)

- IF HORIZONTAL ⟹ . it is y= something
- your equation is y= to where the line goes through

you don't have to do a table of values

WHEN THE GRAPH IS A DIAGONAL LINE:

We are going to work backwards

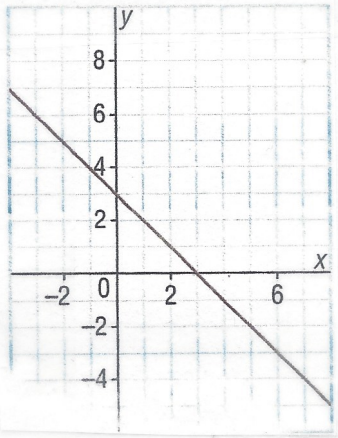
1. PICK 3 ORDERED PAIRS ON THE GRAPH.
2. NOW, SUBSTITUTE the x and y value of one ordered pair in each equation.

3. Once you find the correct equation, substitute the x and y values of the second ordered pair to double check!

What is the Correct Equation?

$y = 3x + 3$ $\quad x + y = 3$ $\quad y = 3x - 3$

Graph A



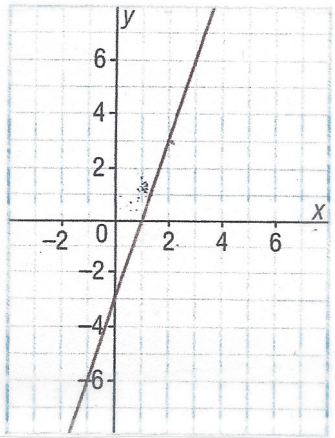
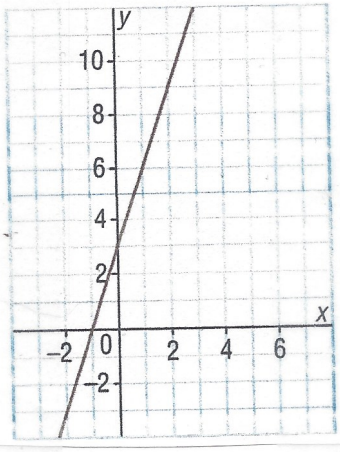
CHOOSE 3 ORDERED PAIRS

SUBSTITUTE 1 ORDERED PAIR IN EACH equation

- AFTER FINDING THE CORRECT EQUATION, TRY THE OTHER 2 ORDERED PAIRS

$y = 3x + 3$ $x + y = 3$ $y = 3x - 3$

Graph B



Graph C