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Functions and Graphs

Graph each function

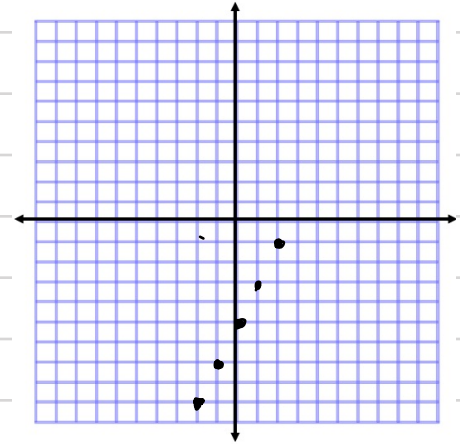
Example

① $f(x) = 2x - 5$ where the domain is $\{-2, -1, 0, 1, 2\}$

① Plug in x coords.

② plot the ordered pairs

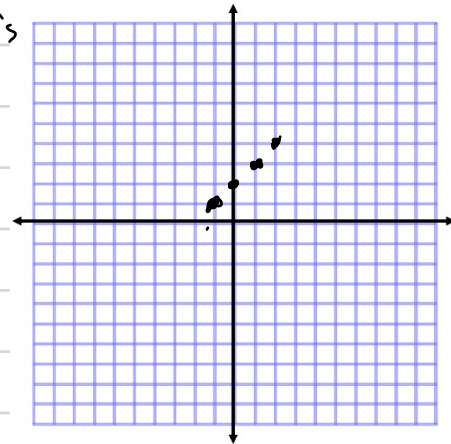
x	$2x - 5$	y	
-2	$2(-2) - 5$	-9	$(-2, -9)$
-1	$2(-1) - 5$	-7	$(-1, -7)$
0	$2(0) - 5$	-5	$(0, -5)$
1	$2(1) - 5$	-3	$(1, -3)$
2	$2(2) - 5$	-1	$(2, -1)$



Do not connect the points!

② $f(x) = x + 2$ Where domain is $\{-1, 0, 1, 2\}$

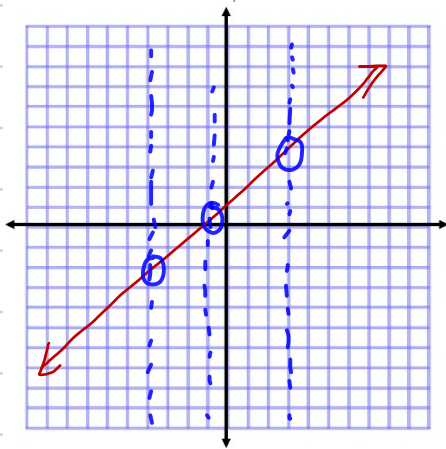
x	$x + 2$	y	
-1	$(-1) + 2$	1	$(-1, 1)$
0	$(0) + 2$	2	$(0, 2)$
1	$(1) + 2$	3	$(1, 3)$
2	$(2) + 2$	4	$(2, 4)$



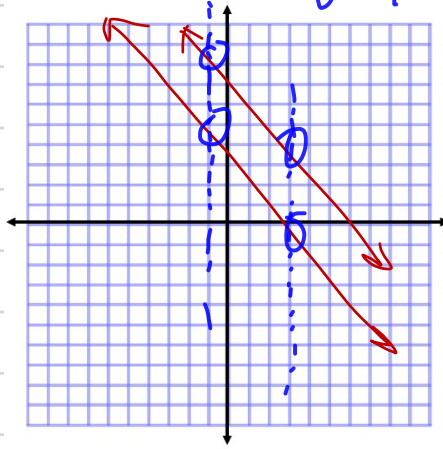
③ Are the following functions?

Vertical Line test

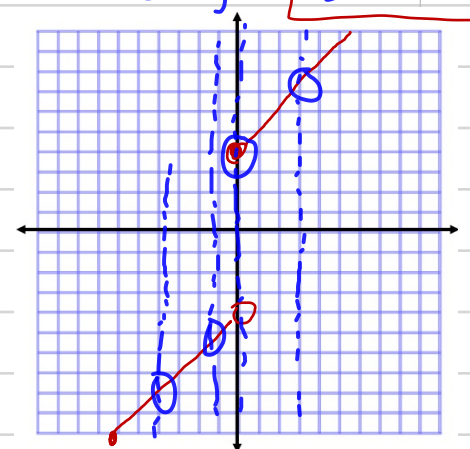
If any vertical line intersects the graph more than once, \rightarrow not function



yes, it is a function



No



Yes, it's a function