

BE-1A | TUESDAY 1-5-10

Simplify:

① $\frac{237}{3}$

② $\frac{576}{9}$

DEFINE:

③ RELATION

④ domain

⑤ range

-
- on time
 - Supplies
 - NEAT, properly labeled and SHOWN WORK.
 - fresh start

Divisibility Rule for 3 and 9

You ALREADY know the
divisibility rule for 2, 5, AND 10...

$\div$ by	if
-----------	----

2 last digit is even which
means it ends in 0, 2, 4, 6, 8

5 last digit is 0 or 5

10 last digit is 0

3 sum (add) of all the digits
is $\div$ by 3

(Ex) $\begin{array}{r} 237 \\ \hline 12 \end{array} \Rightarrow$ sum is 12 which is $\div$ by 3
so 237 is $\div$ by 3

9 sum of all the digits is $\div$ by 9

(Ex) $\begin{array}{r} 576 \\ \hline 18 \end{array} \Rightarrow$ sum is 18 which is $\div$ by 9
so 576 is $\div$ by 9

Ch. 4-6 FUNCTIONS

*①

function

A RELATION in which
EACH element of the
domain is paired with
EXACTLY ONE element of
the range.

*②
"X drives"

In other words, A set of ordered
pairs of (x, y) values where EACH
 x CAN ONLY go with ONE unique y .

③ EX

X	Y
1	4
2	5
3	6

FUNCTION

X	Y
1	4
1	5
3	6

NOT A
FUNCTION

It is OK for different X VALUES to go to the same Y VALUE:

X	Y
1	4
2	4
3	4

FUNCTION

X	Y
4	1
3	1
4	6

NOT A FUNCTION

FUNCTION (Yes or No, if No... why?)

- Ⓐ $\{(3, -6), (4, 2), (5, 3), (7, 8)\}$
- Ⓑ $\{(-1, 5), (-1, 8), (-2, 7), (0, 6)\}$
- Ⓒ $\{(3, -2), (-1, -2), (4, 1)\}$

Function (Yes or No, if No... why)?

①

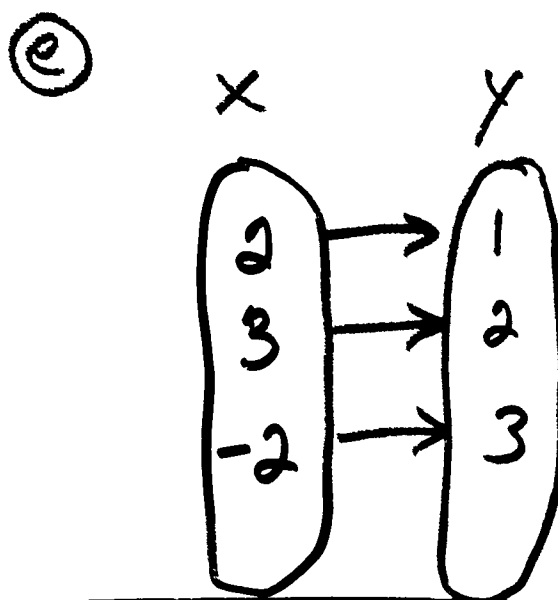
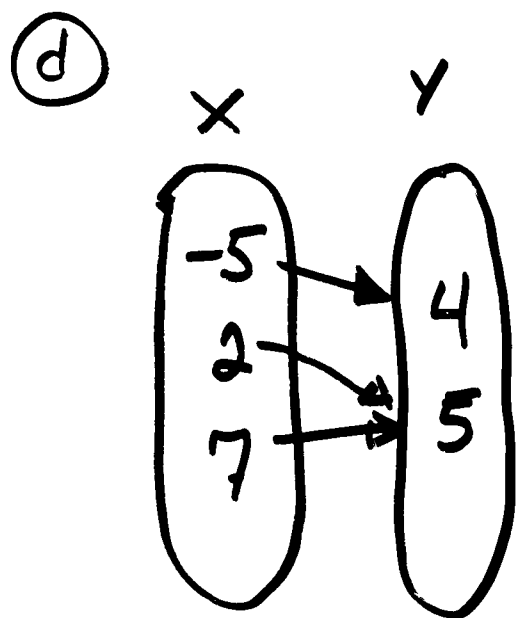
X	Y
-3	5
0	0
4	4

②

X	Y
-1	4
1	4
-1	4

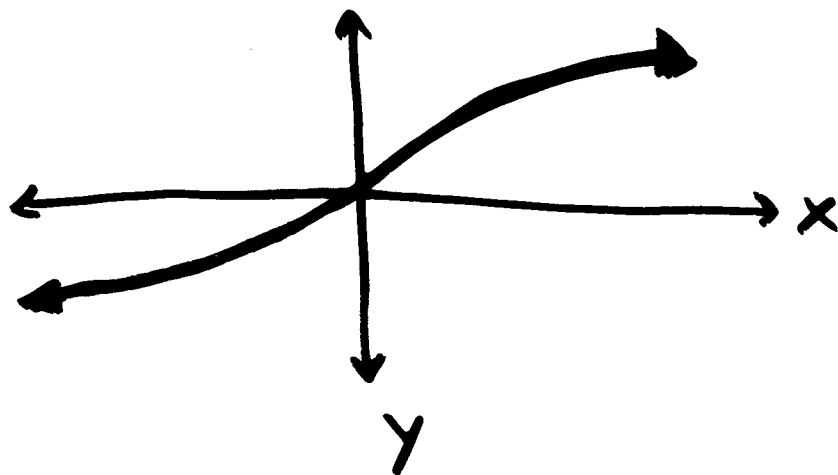
③

X	Y
1	0
5	1
1	2



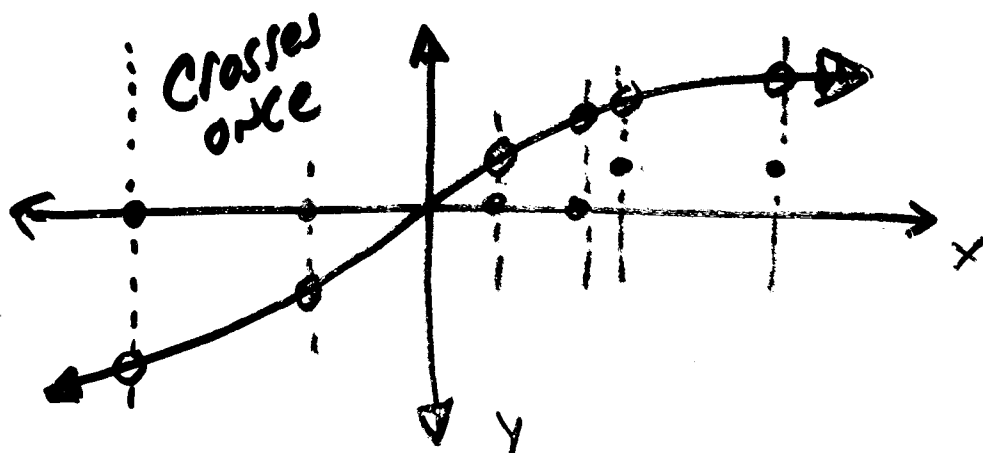
Can you tell by looking at a graph if it is a function?

Ⓔ Function (Yes or No?)



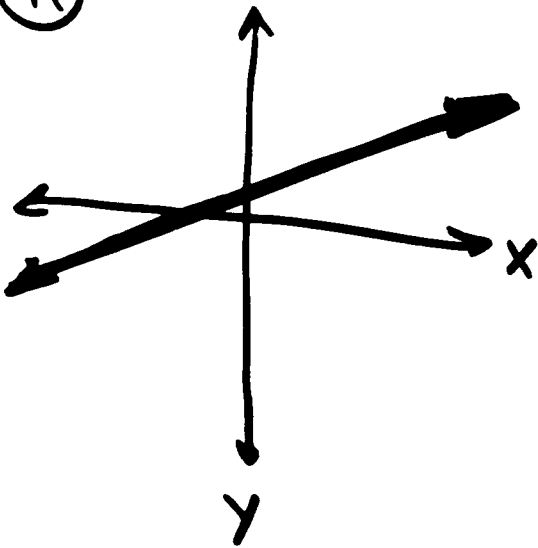
Pick an imaginary x on the far left (some very large negative x) and draw an imaginary vertical line — does it cross the graph once (function) or more than one (NOT a function).

CONTINUE TO RIGHT, ANY NO'S, even one, $\Rightarrow$ (NOT A FUNCTION)

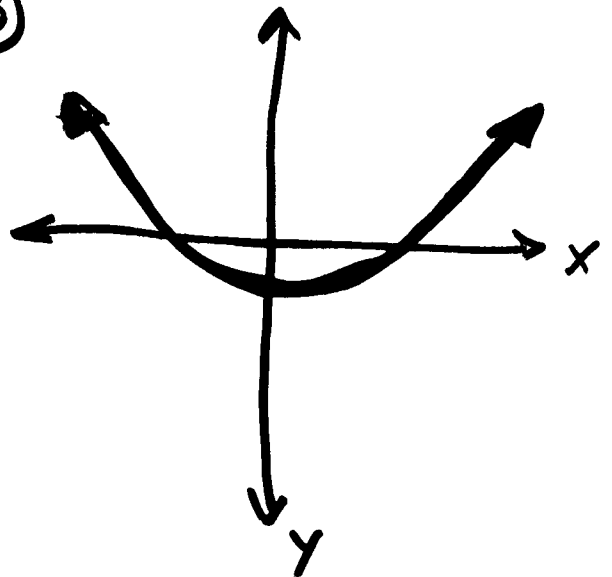


THE graph test for a function (6.)
is called the Vertical Line Test
Function (Yes or No, If No, why not)

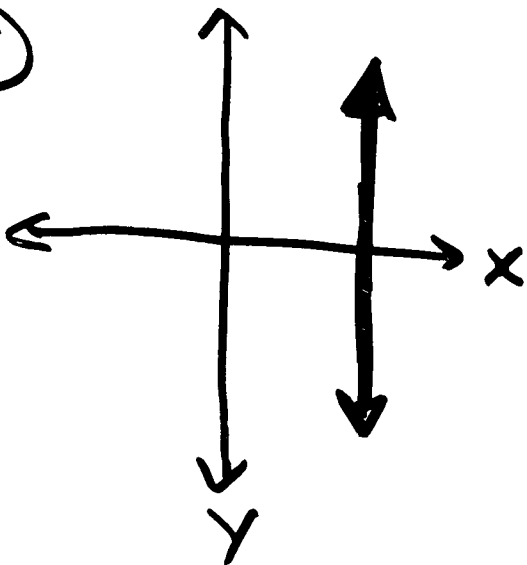
(A)



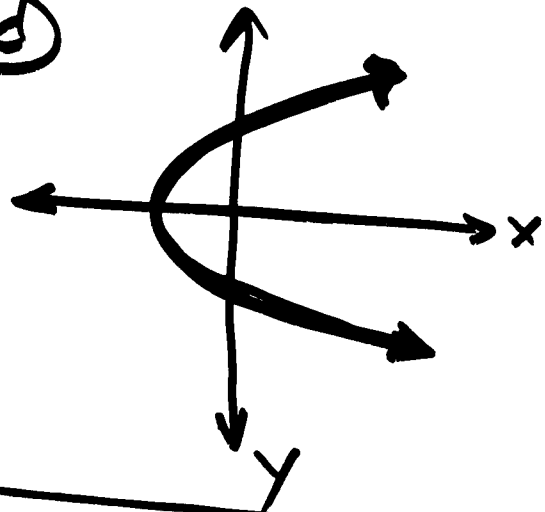
(B)



(C)



(D)



Homework: • Read Ch 4-6

• Pg 228-229 # 3-9

{ if NOT,
WHY
NOT

• NOTE FOR MATH HELP