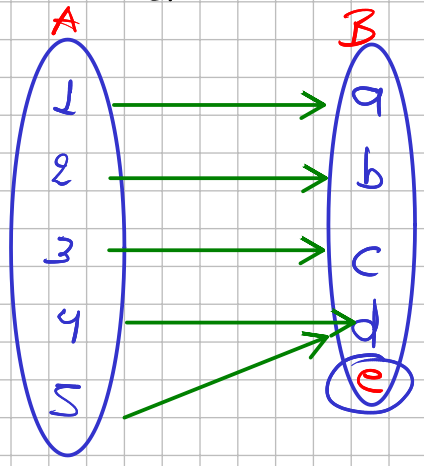
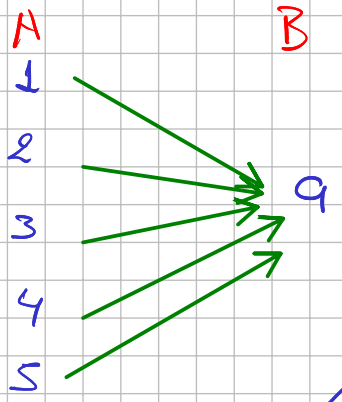
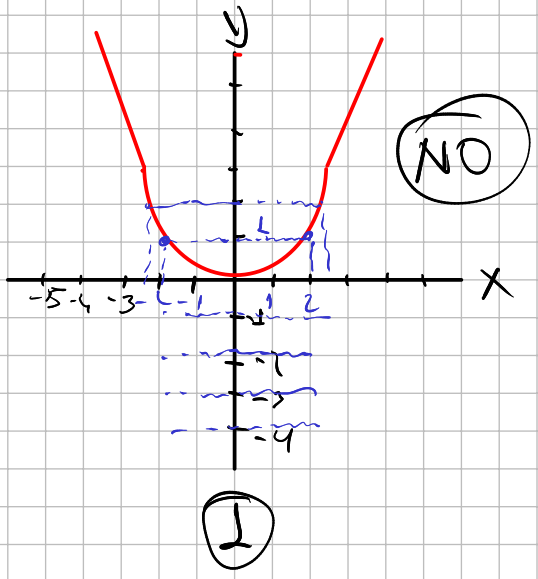
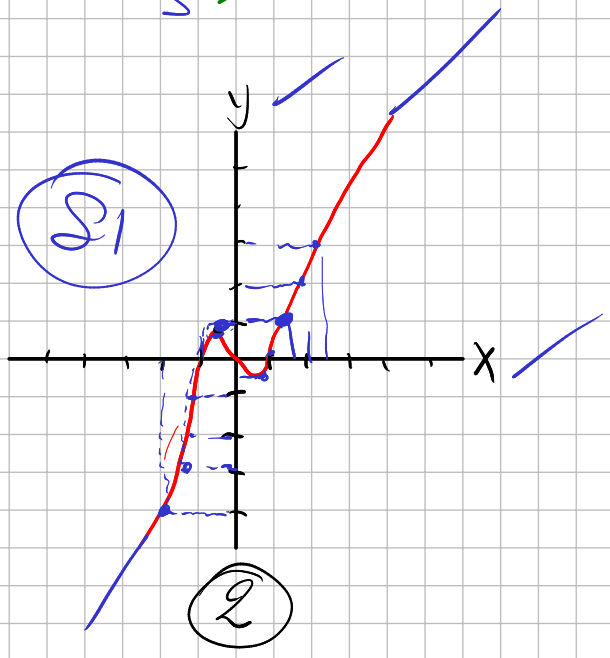
SOBREYECTIVA

CADA ELEMENTO DEL CONJUNTO B LE CORRESPONDE POR LO MENOS UN ELEMENTO DEL CONJUNTO A

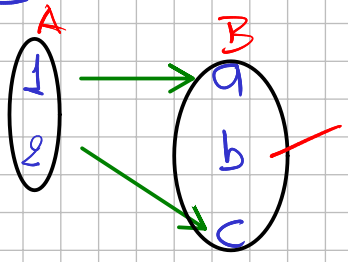




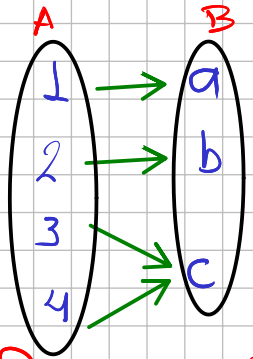




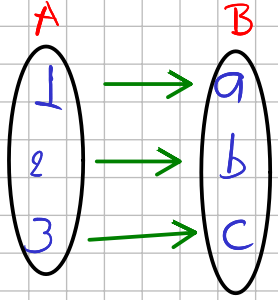
BIYECTIVA → INYECTIVA Y SOBREYECTIVA



INYECTIVA

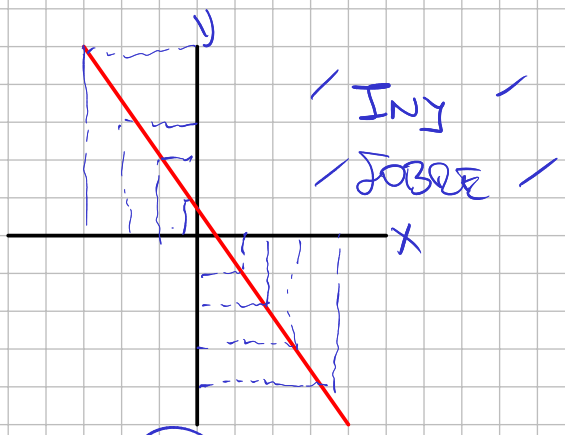


SOBREYECTIVA



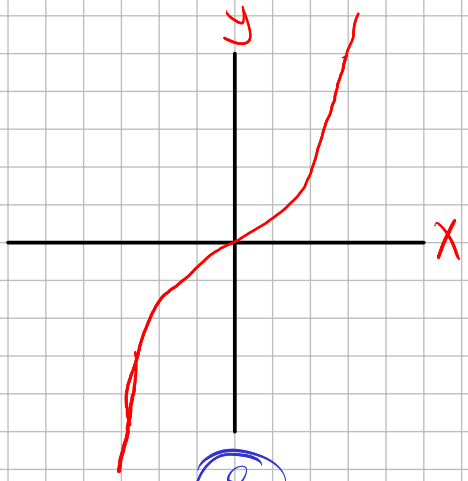
INY
SOBRY

BIYECTIVA



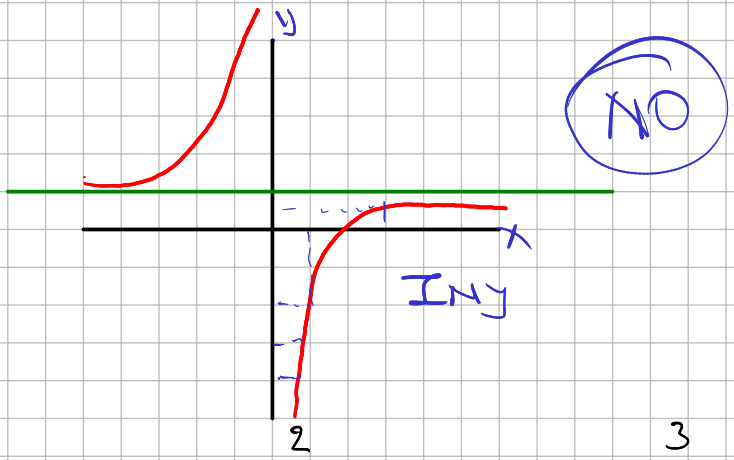
1

BIYECTIVA

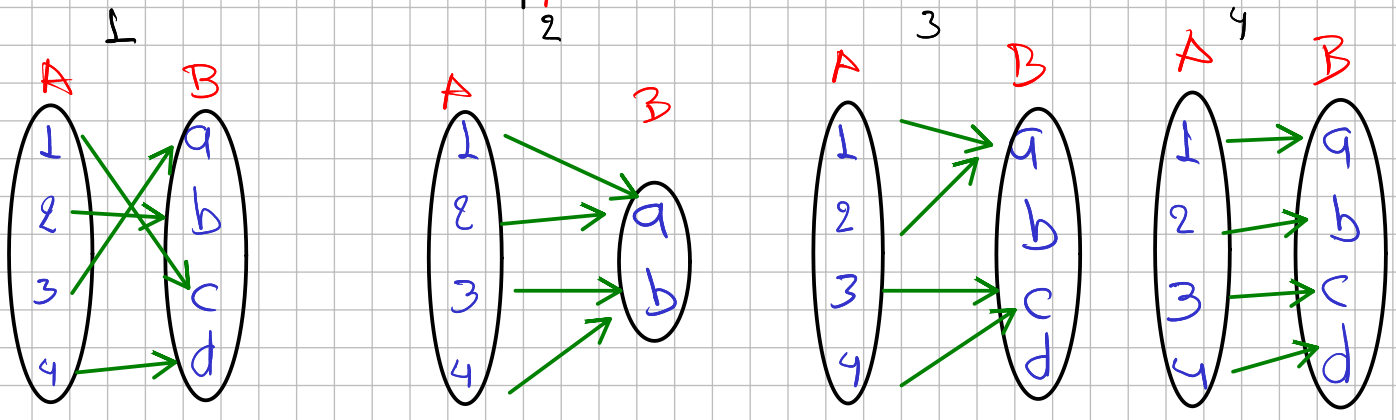


2

BIYECTIVA



2



EVALUACIÓN DE FUNCIONES

$f(x) = 3x - 2 \rightarrow \underline{f(2)}$ y $\underline{f(-3)}$

$f(x) = 3x - 2$
$f(x) = 3(2) - 2$
$f(x) = 4$

$f(2) = (2, 4)$

$f(x) = 3x - 2$
$f(x) = 3(-3) - 2$
$f(x) = -11$

$f(-3) = (-3, -11)$

$f(x) = 1 - 2x \longrightarrow f(3) \quad f(1)$

$f(x) = 1 - 2(3)$
$f(x) = 1 - 6$
$f(x) = -5$
$f(3) = (3, -5)$

$f(x) = 1 - 2(1)$
$f(x) = 1 - 2$
$f(x) = -1$
$f(1) = (1, -1)$

DADA $g(x) = 5x^2 - 2x + 1 \longrightarrow g(3)$ y $g(-2)$

$g(3) = 5(3)^2 - 2(3) + 1$
$g(3) = 5(9) - 6 + 1$
$g(3) = 40$

$g(-2) = 25$

DADA $f(x) = 2x - 5$
$g(x) = x^2 - 3x + 1 \longrightarrow f(0)$ y $f(4)$
$g(5)$ y $g(-2)$

$f(0) = 2x - 5$
$f(0) = 2(0) - 5$
$f(0) = -5$

$f(4) = 2x - 5$
$f(4) = 2(4) - 5$
$f(4) = 3$

$g(5) = x^2 - 3x + 1$
$g(5) = (5)^2 - 3(5) + 1$
$g(5) = 11$

$g(-2) = x^2 - 3x + 1$
$g(-2) = 11$

DADA $f(x) = 3x - 5 \longrightarrow f(x+1)$
$f(x+1) = 3x - 2$

DADA $f(x) = 2x + 4 \longrightarrow f(2b)$
$f(2b) = 4b + 4$

DADA $f(x) = 5x - 3$ $\quad g(m+2)$

$g(x) = x$ $\quad f(2ab)$

$f(2ab) = 1ab - 3$ $\quad g(m+2) = m + 2$

DADA $f(x) = x^2 - 3x - 2 \longrightarrow f(2x+1)$

$f(2x+1) = (2x+1)^2 - 3(2x+1) - 2$

$= 4x^2 + 4x + 1 - 6x - 3 - 2$

$= 4x^2 - 2x - 4$

REPRESENTACIÓN DE FUNCIONES

EL CUADRADO DE X

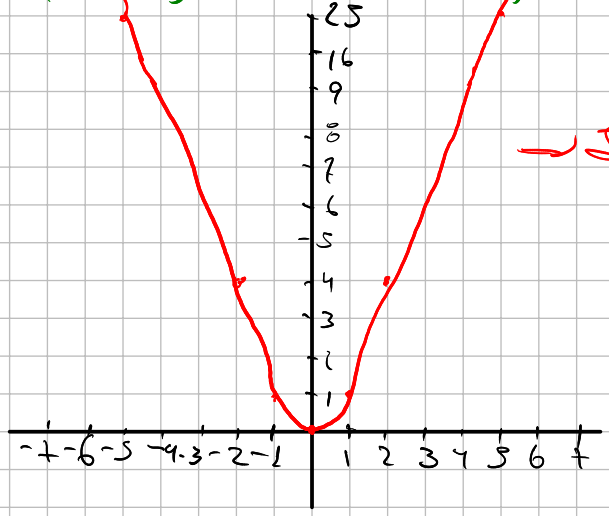
* EXPRESIÓN ANALÍTICA = $f(x) = x^2$
* TABLA DE VALORES

x	-5	-4	-3	-2	-1	0	1	2	3	4	5
f(x)	25	16	9	4	1	0	1	4	9	16	25

* PAREJAS ORDENADAS

$f(x) = \{(-5,25), (-4,16), (-3,9), (-2,4), (-1,1), (0,0), (1,1) \ldots\}$

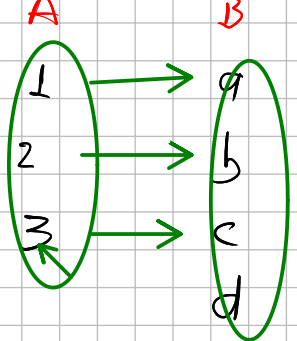
* GRÁFICA



→ INYECTIVA

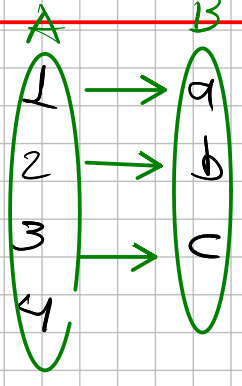
INYECTIVA

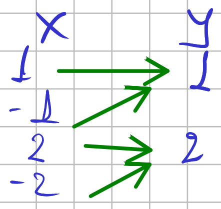
$B \rightarrow A$

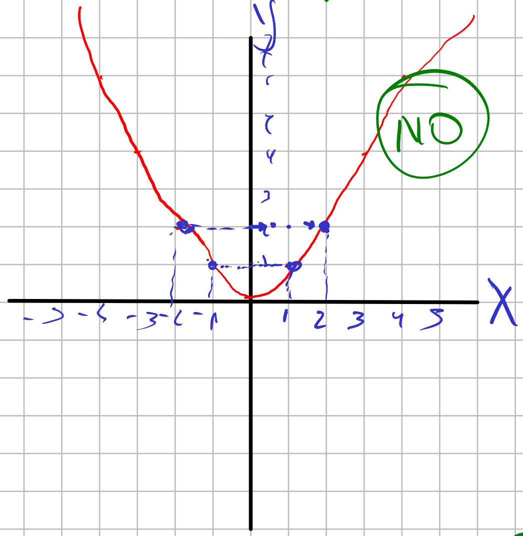


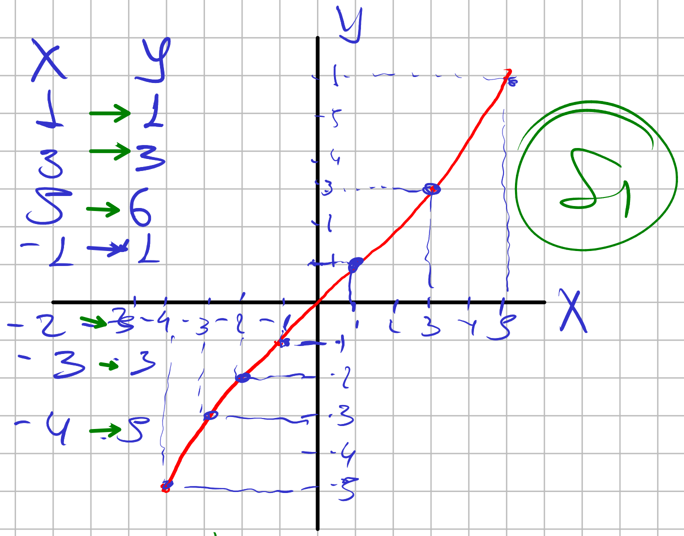
SOBREYECTIVA

$B \rightarrow A$









INYECTIVA Y SOBREYECTIVA } BIYECTIVA

TAREA

DADA $h(x)=2x^2-x+1 \rightarrow$ ~~f~~ (3), $h(2a+b)$

DADA $f(x)=x^3-x^2+x+1 \rightarrow f(2), f(x^2)$

DADA $f(x)=5-3x^2 \rightarrow f(x+1)$

REPRESENTACIÓN DOS X

EXPRESIÓN ANALÍTICA $f(x)=2x$ → I S B

VIERNES 19/01/24
23:59 PM