4.2 Relations & Functions

CA #16 10/15/10

Vocab:

relation

domain

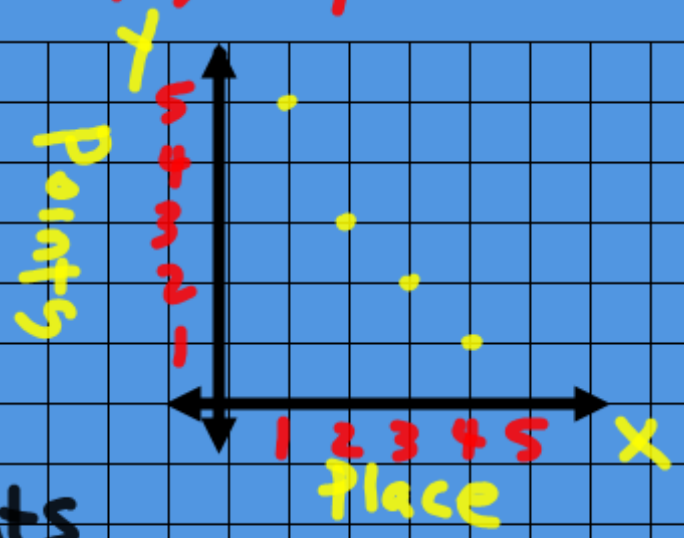
range

function.

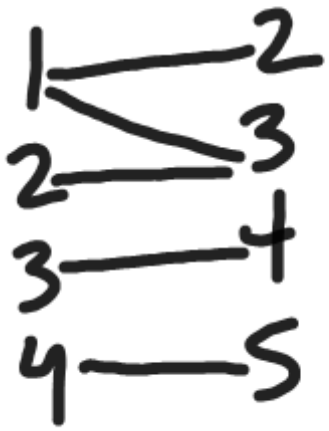
Ex.1 (1,5)(2,3)(3,2)(4,1)

Place	Points
1	5
2	3
3	2
4	1

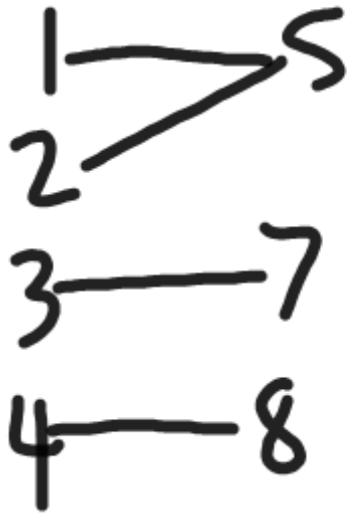
Domain Range



Place		Points
1	→	5
2	→	3
3	→	2
4	→	1



Not a function.

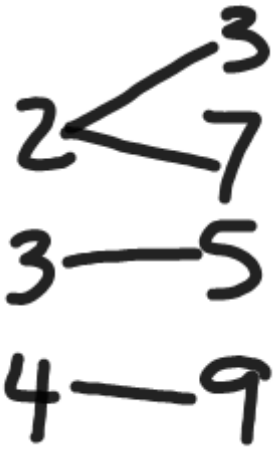


Function

Yes
Function

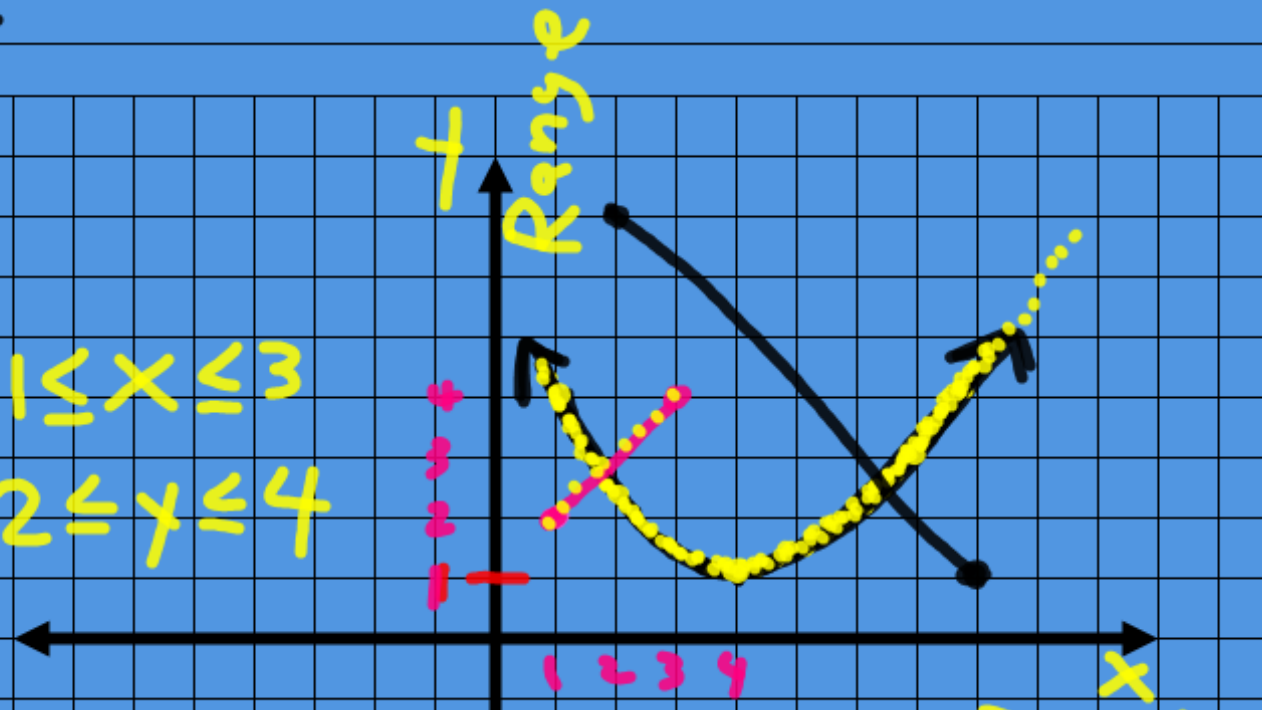
Not a
function.

(2, 3) (2, 7) (3, 5) (4, 9)



Not a function

Ex.2



Domain: $1 \le x \le 3$

Range: $2 \le y \le 4$

Domain: $2 \le x \le 8$

Range: $1 \le y \le 7$

Domain: $\mathbb{R}$

Range: $y \ge 1$

4.3 Writing & Graphing Functions.

Slope intercept

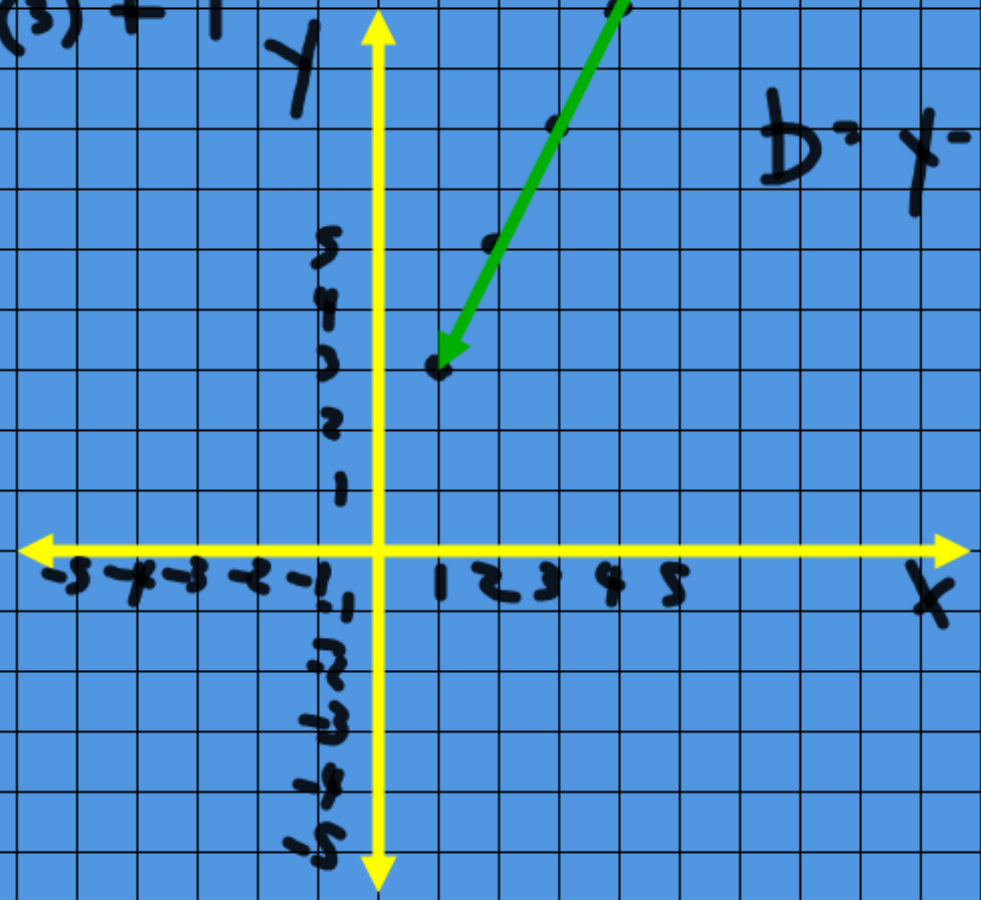
$\boxed{y = mx + b}$

Ex.2 $2x + 1 = y$

$y = 2x + 1$

$2(3) + 1$

x	y
1	3
2	5
3	7
4	9
5	11
6	13



m = slope

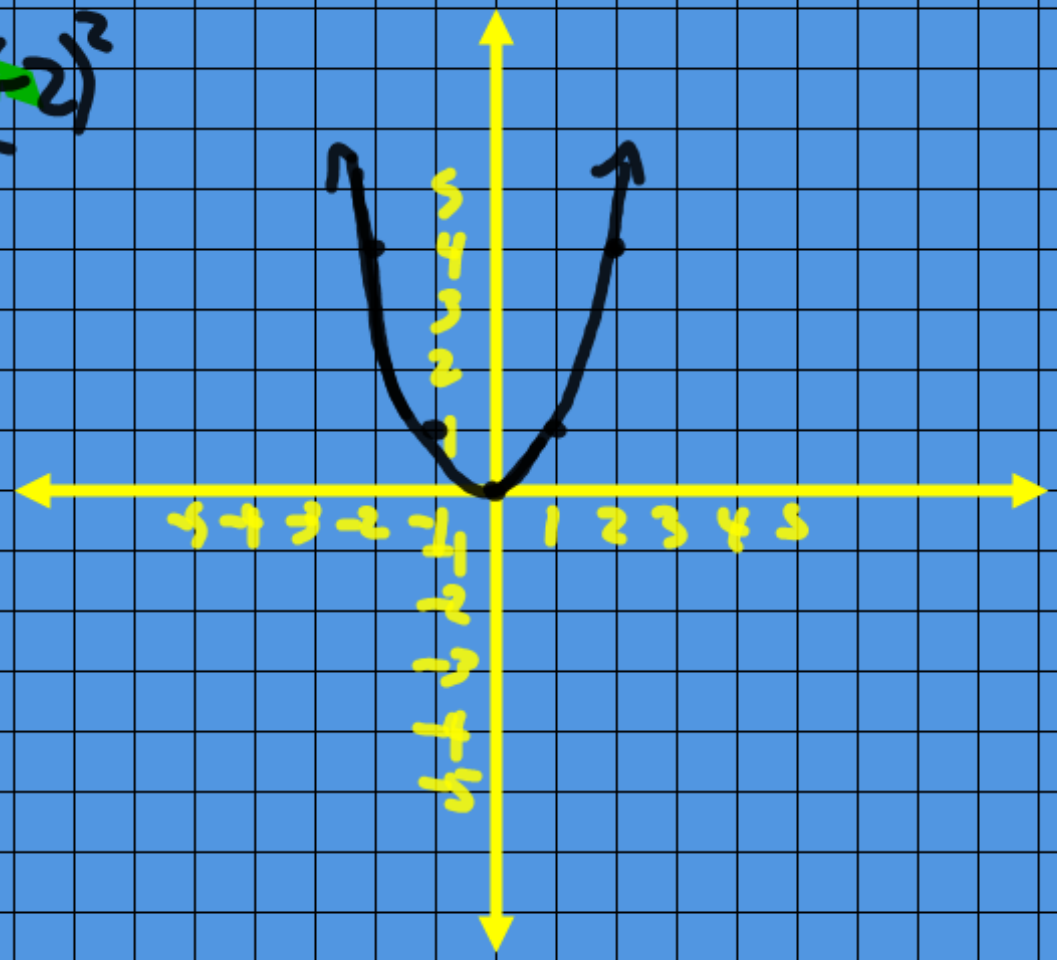
b = y-intercept

Ex. 2B

$y = x^2$

x	y
-2	4
-1	1
0	0
1	1
2	4

$(-2)^2$



Ex.4 $f(x)=5x$

when $x=6$ $f(6)=5(6)$

$f(6)=30$

$y=5x$

when $x=6$

$y=5(6)$

$y=30$

4B $g(t) = 2.30t + 10$

$t=2$ $\underline{g(2)} = 2.30(2) + 10$

$g(\underline{2}) = 4.6 + 10$

$g(2) = 14.6$

$(2, 14.6)$