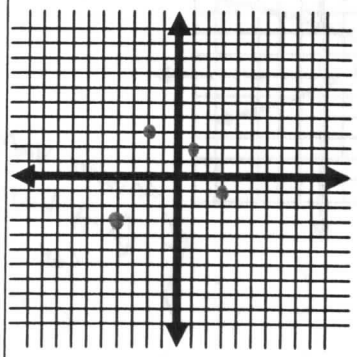
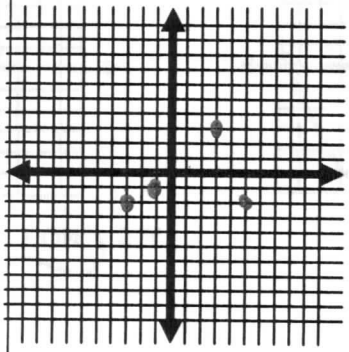
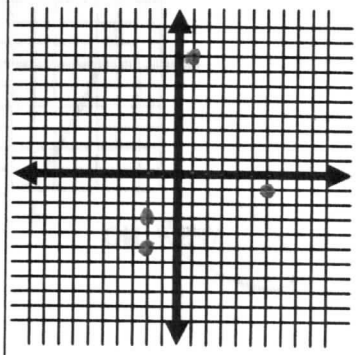
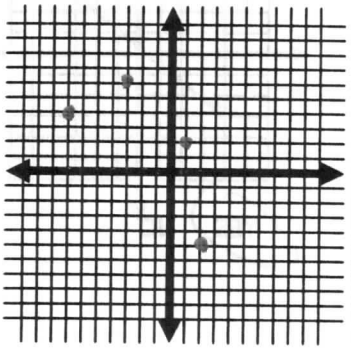
HW: Functions **Day 13**

A) List the domain and range of the relation.

B) Plot each point in the relation.

1)	2)	3)	4)
(-2, 3), (1, 2), (3, -1), (-4, -3)	(5, -2), (-3, -2), (3, 3), (-1, -1)	(6, -1), (-2, -3), (1, 8), (-2, 5)	(-7, 4), (2, -5), (1, 2), (-3, 6)
			
Domain: $\{-4, -2, 1, 3\}$	Domain: $\{-3, -1, 3, 5\}$	Domain: $\{-2, 1, 6\}$	Domain: $\{-7, -3, 1, 2\}$
Range: $\{-3, -1, 2, 3\}$	Range: $\{-2, -1, 3\}$	Range: $\{-3, -1, 5, 8\}$	Range: $\{2, 4, 6\}$

Determine if each relation is a function or not. If not, give two points that prove it is not a function.

5)	6)	7)	8)
(3, -2), (0, 1), (1, 0), (-2, -1), (2, -1)	(2, -5), (-2, 5), (-1, 4), (-2, 0), (3, -4)	(0, 1), (1, 0), (2, 3), (3, 2), (4, 4)	(-1, -1), (2, 5), (4, 8), (-5, -9), (-1, -5)
Yes	No (-2, 5) (-2, 0)	Yes	No (-1, -1) (-1, -5)

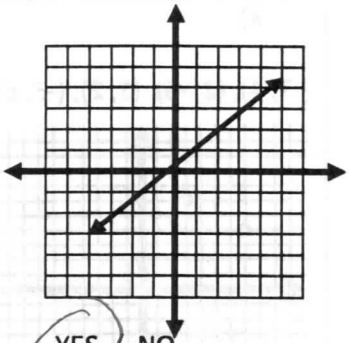
9) Consider this function: {(6, 1), (4, 9), (2, -5)}

Add a point so that it is still a function: _____ ← (answers vary) → must have different x-value

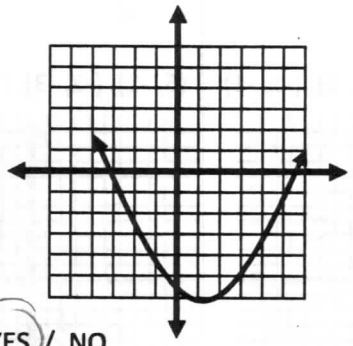
Add a point so that it is no longer a function: _____ → must have same x-value as one already used

[more problems on the back]

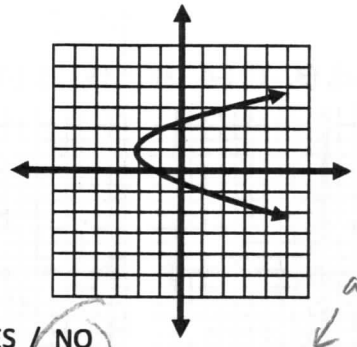
10) Are the following relations a function? If not, give two points that prove it!



YES / NO



YES / NO

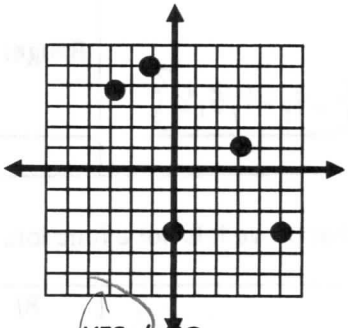


YES / NO

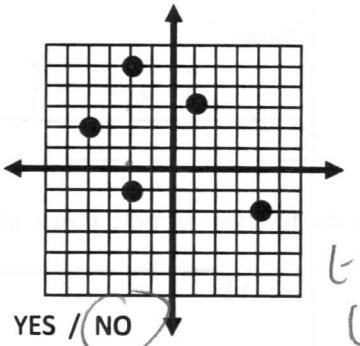
answers vary (must have same x-coordinate)

(,)

(,)



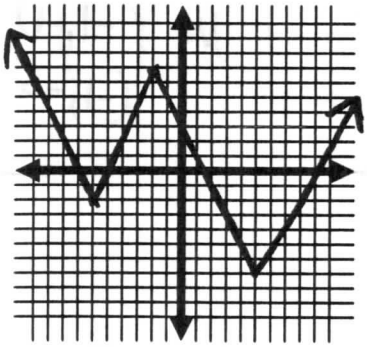
YES / NO



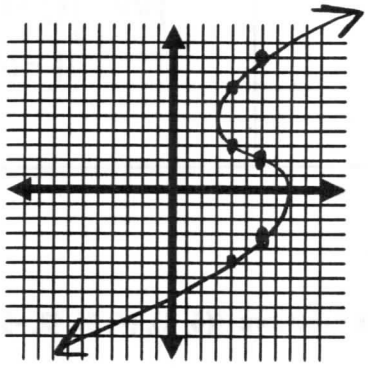
YES / NO

(-2, 5)

(-2, -1)



YES / NO



YES / NO

answers vary (must have same x-coordinate)

(,)

(,)