

#1

domain: all different first-position values

$$\{a, b, c, d, f, g\}$$

- no repetitions
- preferably ordered

range: all different/distinct

second-position values

$$\{0, 5, 7, 8, 12\}$$

- no repetitions
- preferably ordered

#2

yes

recall the definition of function as a relation:

a relation in which each member of the domain corresponds to exactly one member of the range is called a function.

#3

yes, it is a function

because for every value of x from the domain there is only one value for y .

#4

no, it is not.

Consider

$(a, 3)$

\swarrow and \nearrow

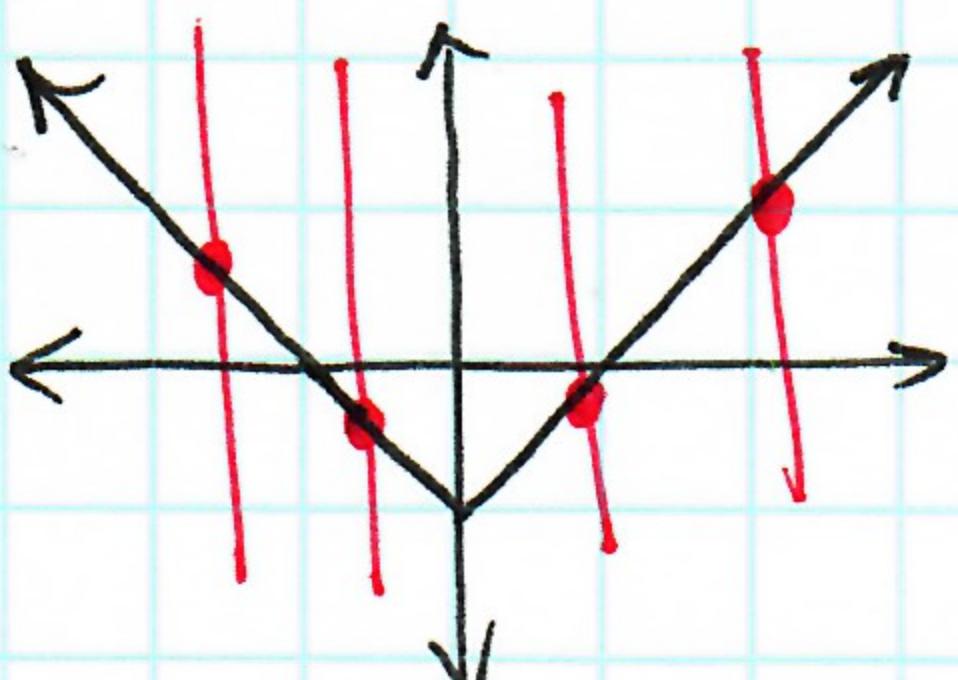
- two pairs from the relation

one value from the domain

two different values from the range

- the definition given in #2 is violated

#5



yes, it does, because

every vertical line intersects the graph in at most one point.