

Check for the Functions

A relation is a rule that takes input values and assigns them to output values. A relation is a **function** if each input value has *exactly one* output value. Determine if each relation below is a function. In the box under each relation, mark a **✓** if the relation is a function or an **X** if the relation is not a function.



1.

x	y
2	-2
3	-3
4	-4
5	-5

✓

2.

x	y
-4	5
-3	5
-3	1

X

3.

(2, 8), (1, 12), (-1, 14), (3, 10)

✓

4.

(4, -5), (5, -8), (6, -11), (6, -12)

X

5.

x	y
3	10
6	15
9	15

✓

6.

x	y
8	12
9	14
10	15
10	20

X

7.

(-6, 4), (2, 4), (0, 4), (4, 4)

✓

8.

x	y
10	-6
11	-5
12	-4

✓

9.

x	y
-1	0
3	-4
5	-6
5	-8

X

10.

x	y
-30	20
16	20
35	20

✓

11.

x	y
8	-3
6	2
7	0
6	-2

X

12.

(12, -3), (23, -6), (12, -4), (15, 0)

X