

The translation above shows the object moving

- A. -8 in the x direction, and 6 in the y direction
- B. -8 in the x direction, and -6 in the y direction
- C. -6 in the x direction, and -8 in the y direction
- D. -7 in the x direction, and -6 in the y direction

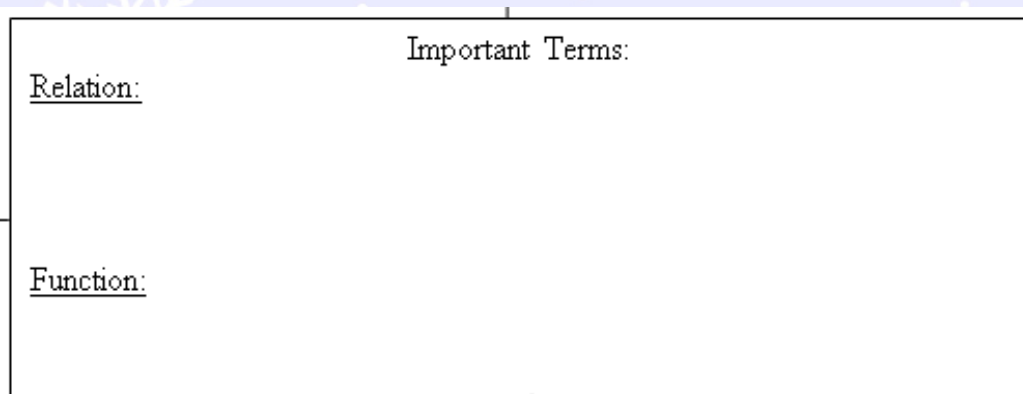
2. Robert is a cab driver and he charges a base fee of \$2.10 for every fare, plus \$1.90 for every mile traveled. If n represents the number of miles traveled, which of the following sentences can be used to find C , the amount Robert charges for each fare?

- A. $C = 2.1n + 1.9$
- B. $C = 2.1 + 1.9n$
- C. $C = 2.1 - 1.9n$
- D. $C = 2.1 \times 1.9n$

3. What value for t makes this equation true?

$$\frac{1}{3}(t + 7) = 17$$

- A. 58
- B. 30
- C. 44
- D. $3 \frac{1}{3}$



Important Terms:

Relation:

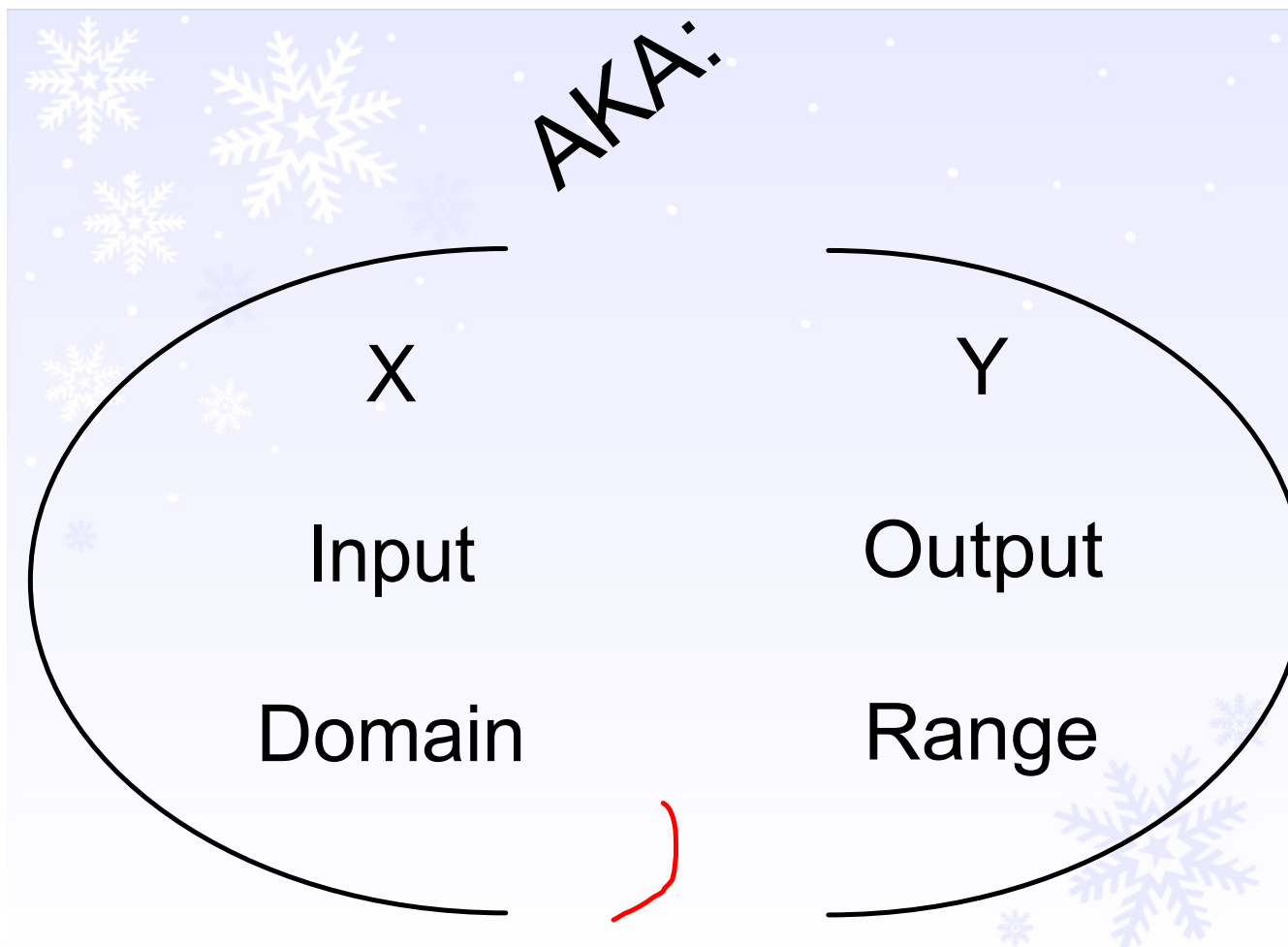
Function:

Relation - correspondence between two sets
(can be written as an ordered pair, has an input and an output)

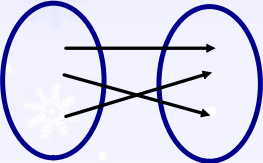
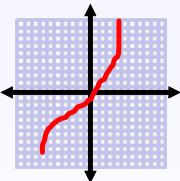
EVERY ORDERED PAIR IS A RELATION!!!!!!!!!!

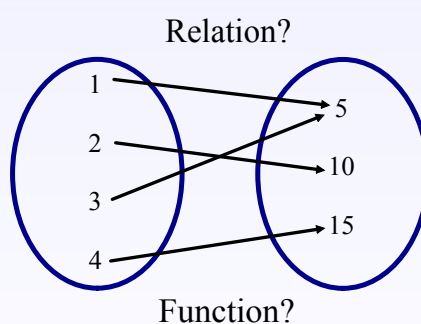
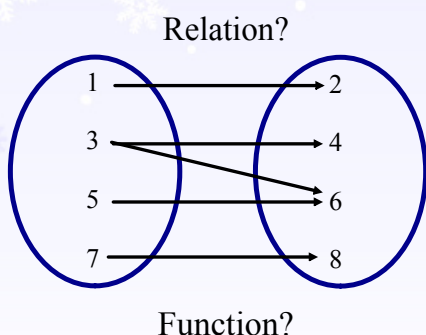
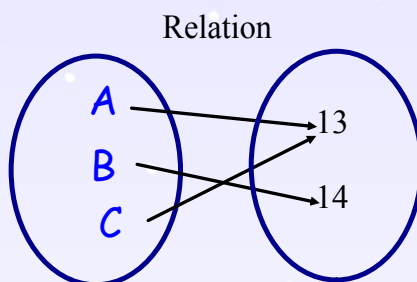
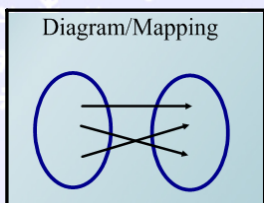
Function - For each input there is exactly one output.

**NOT EVERY ORDERED PAIR IS A
FUNCTION!!!!!!!!!!**



4 ways to test/demonstrate a function:

<p>Diagram/Mapping</p> 	<p>Set Notation</p> $\{(x,y) (a,b) (m,n)\}$										
<p>Table</p> <table border="1" data-bbox="260 1189 655 1265"> <tr> <td>Input X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Output Y</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Input X					Output Y					<p>Graphically</p> 
Input X											
Output Y											



YES

NO

Set Notation

$\{(x,y) (a,b) (m,n)\}$

YES

NO

$\{(1,2) (3,4) (3,6) (5,6) (7,8)\}$ -- No, Not a FUNCTION!!

$\{(1,5) (2,10) (3,5) (4,15)\}$ -- Yes, It is a FUNCTION!!

$\{(2,5) (3,10) (4,15) (2,20)\}$ -- Function?

$\{(2,4) (3,6) (4,8) (6,12)\}$ -- Function?

$\{(2,4) (3,8) (2,12) (4,16)\}$ -- Function?

$\{(4,4) (6,4) (8,4) (10,4)\}$ -- Function?

Table				
Input X				
Output Y				

x	y
1	2
3	4
3	6
5	6
7	8

No!
Not a function!

x	y
1	5
2	10
3	5
4	15

Yes!
It is a function!

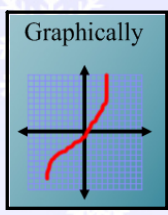
Function?

x	y
-1	3
0	6
1	9
3	12
5	15

x	y
-1	2
0	4
-1	6
3	8
5	10

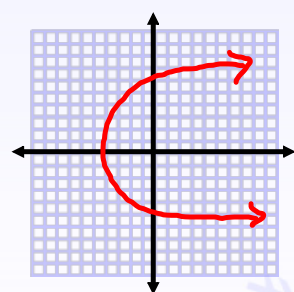
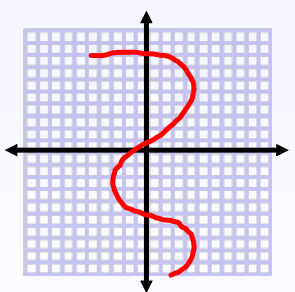
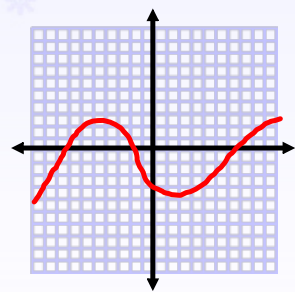
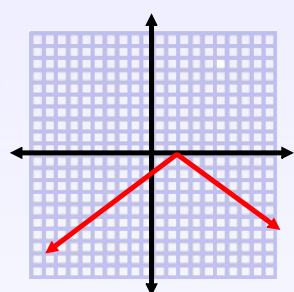
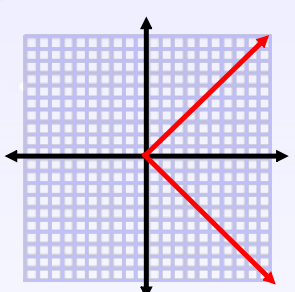
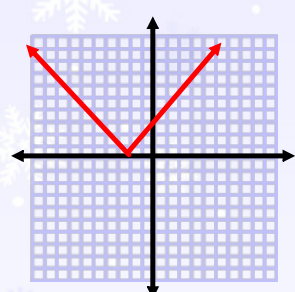
x	y
1	0
3	2
3	4
5	6
7	8

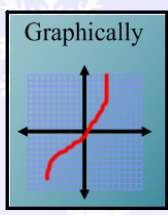
x	y
1	2
3	4
5	6
5	6
7	8



"Vertical Line Test"

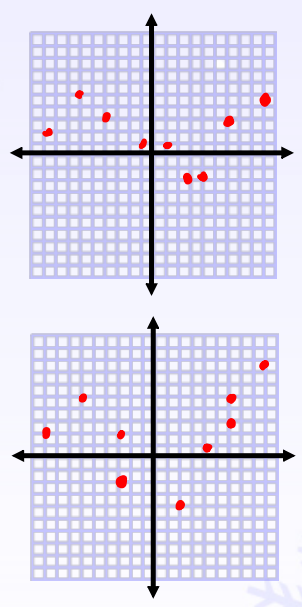
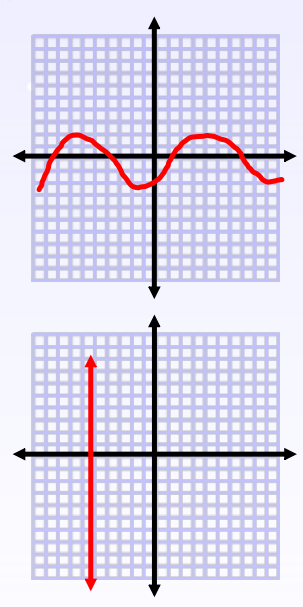
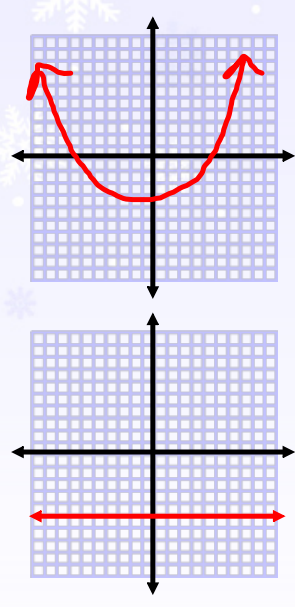
(a vertical line through the graphed relation will never touch more than one point at a time)





"Vertical Line Test"

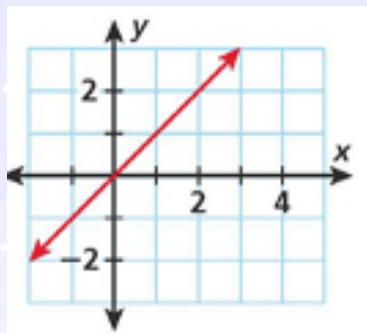
(a vertical line through the graphed relation will never touch more than one point at a time)



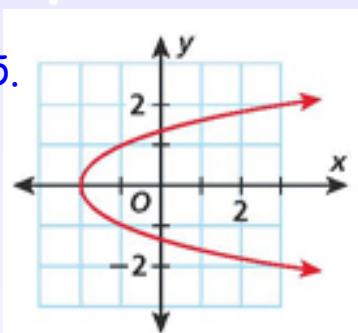
1.

x	y
0	5
1	4
2	3
3	2

4.



5.



2.

x	y
-1	-7
9	1
12	8
15	-7

6. $(-4, 3)$
 $(0, -5)$
 $(6, -17)$
 $(10, -25)$

3.

x	y
2	4
5	5
8	6
2	7

7.

Which of the following relations is a function?

- A. $(1, 4), (-1, 6), (1, 3), (-7, 2)$
- B. $(9, 1), (-1, 4), (1, 1), (9, 2)$
- C. $(1, 4), (-1, 2), (9, 1), (-7, 2)$
- D. $(1, 0), (-1, 3), (9, 1), (-1, 5)$

Which of the following represents a relation that is NOT a function?

8.

A.

X	-10	-6	0	2
Y	34	32	40	34

B.

X	-10	-6	-10	2
Y	34	32	40	34

C.

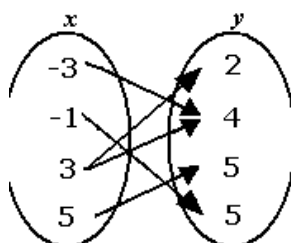
X	-10	-6	8	12
Y	34	32	40	34

D.

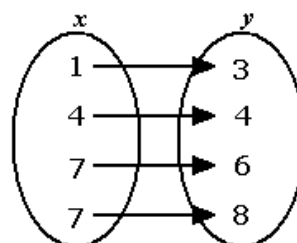
X	8	-6	12	-10
Y	34	32	40	34

9.

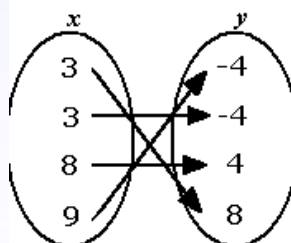
Which of these data sets represents a function?



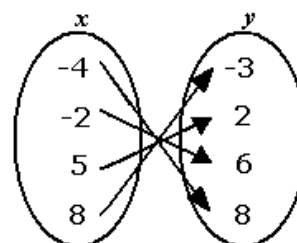
Q.



R.



S.



T.

Workout Book

Pg. 75

Pg. 76

ALL

Coach Book

Pgs. 149-150