Practice Problems 1.3

Identify the domain and range of the function.

1)

Input	Output
0	5
1	7
2	15
3	44

D = {0, 1, 2, 3}
R = {5, 7, 15, 44}

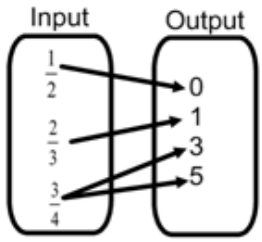
2)

Input	Output
6	5
12	7
21	10
42	17

D = {6, 12, 21, 42}
R = {5, 7, 10, 17}

Tell whether the pairing is a function.

3)



NO 3/4 is on input that goes to 2 outputs.

Describe and correct the error related to the function represented by the table.

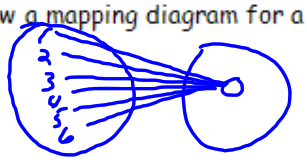
4)

Input, x	1	2	3	4	5
Output, y	6	7	8	6	9

The pairing is not a function. One output is paired with two inputs.

The pairing IS a function. Each input has only 1 output.

5) Draw a mapping diagram for a function with 6 inputs. Then make a table to represent the function.



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

6) MULTIPLE CHOICE: Each output of a function is .5 less than the corresponding input. Which equation is a rule for the function?

a) y = x - 0.5 b) y = x+0.5 c) y = 0.5 - x d) y = 0.5x

Make a table for the function. Identify the range of the function.

7) y = x + 3.5
Domain: 12, 15, 22, 30

x	y
12	15.5
15	18.5
22	25.5
30	33.5

R = {15.5, 18.5, 25.5, 33.5}

8) $y = \frac{1}{2}x + 3$
Domain: 4, 6, 9, 11

x	y
4	5
6	6
9	7.5
11	8.5

R = {5, 6, 7.5, 8.5}

8) $y = \frac{0.5x + 1}{2}$
Domain: 0, 2, 4, 6

x	y
0	.5
2	1
4	1.5
6	2

R = {.5, 1, 1.5, 2}

10) Write a rule for the function:

Input, x	15	20	21	30	42
Output, y	7	12	13	22	34

Y = X − 8