Name:_____

1.3 Represent Functions as Rules and Tables Notes

Domain:

Range:

Input (gallons)	10	12	13	17
Output(dollars)	19.99	23.99	25.99	33.98

Domain: Range:

Function:

Tell whether each pairing is a function and identify the domain and range

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

$y = \frac{1}{2}x + 7$
Domain: 2, 6, 10, 12

Write a rule for the function:

Input(x)	4	7	10	13
Output (y)	8	11	14	17

You Try!

Summarize your notes:

Practice Problems

Identify the domain and range of the function.

1)

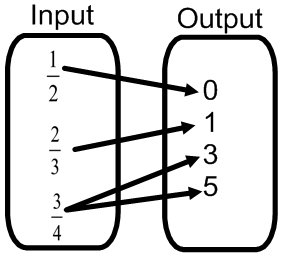
Input	Output
0	5
1	7
2	15
3	44

2)

Input	Output
6	5
12	7
21	10
42	17

Tell whether the pairing is a function.

3)



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.

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

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

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

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

10) Write a rule for the function:

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

QUICK REVIEW

1) $\frac{3}{7} + \frac{1}{2}$

2) $\frac{4}{7}\left(\frac{7}{9}\right)$

3) Find the Greatest Common:
18, 35

1.3 Application

Use the following table.

Inputs, x	2	4	7	8
Outputs, y	7	9	12	13

1) Find the domain and range. 2) Find a rule.

3) You go around collecting cans after school that are left in the hallway. Every minute that you walk you find two cans.

a) **Complete the following table**:

Time	1	4	6	7	10
# of cans					

b) **Fill in the blank:** For each minute you walk you collect 2 cans, so _____ is a

function of _____.

c) **Write a rule** for the amount of cans you have as a function of the number of minutes you walk the halls.

4) The table below shows the average number of minutes spent on math outside of class each night and the corresponding grade in Algebra class.

Minutes, x	0	5	10	15	20
% Grade, y	45	50	55	60	65

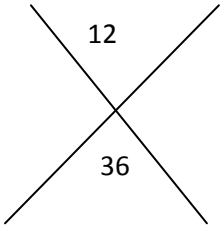
a) **Write a rule.** Use the table to write a rule for the % grade as a function of the number of minutes spent studying outside of class.

b) **Predict.** What grade could someone expect to earn if they spent 23 minutes studying outside of class?

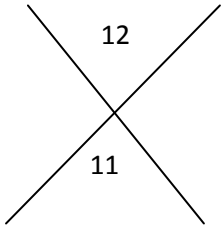
c) **Predict:** How many minutes would someone spend outside of class studying if they wanted to earn a 95% in class.

Coming up…MAGIC X. (What two numbers add to the top # and multiply to the bottom #?)

1)



2)



3)