Name: $\qquad$ Date: $\qquad$

Section 1.6 Homework
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## Part A

Domain= Input Values
Range= Output Values

DOMAIN AND RANGE Identify the domain and range of the function.
3.

| Input | Output |
| :---: | :---: |
| 0 | 5 |
| 1 | 7 |
| 2 | 15 |
| 3 | 44 |

4. Input Output

5. 

| Input | Output |
| :---: | :---: |
| 6 | 5 |
| 12 | 7 |
| 21 | 10 |
| 42 | 17 |

Domain: $\qquad$ Domain: $\qquad$ Domain: $\qquad$
Range: $\qquad$ Range: $\qquad$ Range: $\qquad$

Function=Each Input value has only one Output value.

IDENTIFYING FUNCTIONS Tell whether the pairing is a function.
6.

| Input | Output |
| :---: | :---: |
| 0 | 7.5 |
| 1 | 9.5 |
| 2 | 11.5 |
| 3 | 13.5 |

Function?


Function?
8.

| Input | Output |
| :---: | :---: |
| 7 | 13 |
| 11 | 8 |
| 21 | 13 |
| 35 | 20 |

Function?

Set B
Make a table for the function. Identify the range of the function.
14) $y=x-3 \quad$ Domain: 12, 15, 22, 30
a) Make a table. Hint: Input each domain into the function and find the output.

| Input | 12 | 15 | 22 | 30 |
| :--- | :--- | :--- | :--- | :--- |
| Output |  |  |  |  |

$$
y=x-3 \text { for } x=12 \quad y=x-3 \text { for } x=15
$$

$$
y=x-3 \text { for } x=22
$$

$$
y=x-3 \text { for } x=30
$$

b) Identify the range of the function.

Range: $\qquad$
15) $y=x+3.5 \quad$ Domain: $4,5,7,8,12$
a) Make a table. Hint: Input each domain into the function and find the output.

| Input | 4 | 5 | 7 | 8 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Output |  |  |  |  |  |

$y=x+3.5$ for $x=4 \quad y=x+3.5$ for $x=5$
$y=x+3.5$ for $x=7$

$$
y=x+3.5 \text { for } x=8
$$

$$
y=x+3.5 \text { for } x=12
$$

b) Identify the range of the function.

Range: $\qquad$
16) $y=3 x+4 \quad$ Domain: $0,5,7,10$
a) Make a table. Hint: Input each domain into the function and find the output.

| Input | 0 | 5 | 7 | 10 |
| :--- | :--- | :--- | :--- | :--- |
| Output |  |  |  |  |
| $y=3 x+4 \quad$ for $x=0$ |  |  |  |  |

$$
y=3 x+4 \text { for } x=5
$$

$$
y=3 x+4 \text { for } x=7
$$

$$
y=3 x+4 \text { for } x=10
$$

b) Identify the range of the function.

Range: $\qquad$

## WP

23) You have 10 quarters that you can use for a parking meter.
a) Each time you put 1 quarter in the meter, you have 1 less quarter, so
$\qquad$ is a function of $\qquad$ .
b) Write a rule for the number $y$ of quarter that you have left as a function of the number $x$ of quarters you have used so far. Identify the domain of the function.

How many quarters are you starting with? $\qquad$
Are you taking quarters away or adding them?
Rule: $y=$ $\qquad$
Domain (What can $x$ be? How many quarters can you take away): $\qquad$
c) Make a table and identify the range.

| Input | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Output |  |  |  |  |  |  |  |  |  |  |  |

Range: $\qquad$
24) At a yard sale, you find 5 paperback books by your favorite author. Each book is \$.75.
a) For each book you buy, you spend $\$ .75$, so $\qquad$ is a function of
b) Write a rule for the amount (in dollars) you spend as a function of the number of books you buy. Identify the domain of the function.

Rule (How can I find the total amount spent?): $y=$
Domain (What can $x$ be? How many books can I buy?):
c) Make a table and identify the range of the function.

| Input | 0 | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Output |  |  |  |  |  |  |

Range:

