

Algebra I

1-6

Represent Functions as
Rules and Tables

Definitions

Function -

Domain -

Range -

Independent Variable -

Dependent Variable -

Examples

- 1) The input-output table shows the temperatures over various increments of time. Identify the domain and range of the function.

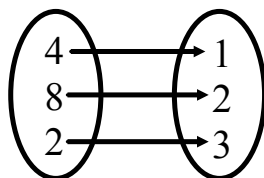
Input	0	2	4	6
Output	24	27	30	33

Domain: _____

Range: _____

- 2) Tell whether the pairing is a function. Explain.

a) Input Output



b)

Input	Output
2	2
2	4
3	6
4	8

Functions defined by a rule

Rule	Equation	Table												
The output is two less than the input.	_____	<table border="1"> <tr> <td>Input</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>Output</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Input	2	4	6	8	10	Output					
Input	2	4	6	8	10									
Output														

Examples:

- 3) The domain of the function $y = 3x$ is $D = \{0,1,2,3\}$. Make a table for the function, then identify the range of the function.

x	0	1	2	3	Range:
$y = 3x$					

- 4) Write a rule for the function.

Input	3	5	7	9	11
Output	6	10	14	18	22

Let x be the input and y be the output. Notice that each output is _____ the corresponding input. So, a rule for the function is _____.

Checkpoint

Write a rule for the function. Identify the domain and the range.

Yarn (yd)	1	2	3	4	Rule _____
Cost (\$)	1.5	3	4.5	6	Domain _____
					Range _____

Assignment:

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1, 2, 5 - 10,
12, 13, 16 - 18,
20, 21, 25, 28,
30, 31