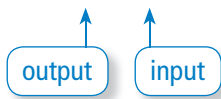


Key Concept and Vocabulary

Function Rule: $y = 2x + 4$



Words: Double the value of x and add 4 to get the value of y .

Visual Model

You can see how x and y compare by making an Input-Output table.

Function Rule: $y = 2x + 4$

Input, x	0	1	2	3	4	5
Output, y	4	6	8	10	12	14

Skill Example

1. **Function Rule:** $y = 20 - 4x$

Input-Output Table:

Input, x	0	1	2	3	4	5
Output, y	20	16	12	8	4	0

Words: Multiply the value of x by 4 and subtract from 20 to get the value of y .

Application Example

2. The equation $F = \frac{9}{5}C + 32$ describes how the Fahrenheit and Celsius scales relate. Describe this in words.

Input, C	0	5	10	15	20	25
Output, F	32	41	50	59	68	77

• Multiply C by $\frac{9}{5}$ and add 32 to get F .

PRACTICE MAKES PURR-FECT®



Check your answers at BigIdeasMath.com.

Complete the table. Then describe the pattern.

3. $y = 2x + 6$

Input, x	0	1	2	3	4	5
Output, y	6	8	10	12	14	16

Multiply the value of x by 2 and add 6 to get the value of y .

4. $y = 16 - 2x$

Input, x	0	1	2	3	4	5
Output, y	16	14	12	10	8	6

Multiply the value of x by 2 and subtract from 16 to get the value of y .

5. $y = 3x + 7$

Input, x	0	1	2	3	4	5
Output, y	7	10	13	16	19	22

Multiply the value of x by 3 and add 7 to get the value of y .

6. $y = 65 - 10x$

Input, x	0	1	2	3	4	5
Output, y	65	55	45	35	25	15

Multiply the value of x by 10 and subtract from 65 to get the value of y .

UNIT CONVERSION Complete the table and describe the function rule in words.

7. Inches to Centimeters: $C = 2.54I$

Input, I	0	1	2	3	4	5
Output, C	0	2.54	5.08	7.62	10.16	12.7

Multiply I by 2.54 to get C .

8. Miles to Kilometers: $K = 1.6M$

Input, M	0	1	2	3	4	5
Output, K	0	1.6	3.2	4.8	6.4	8

Multiply M by 1.6 to get K .