



Writing a Function Rule



James Madison
HIGH SCHOOL

Quick Review

1. What does “ $f(x)$ ” mean?

$f(x)$ is the same as y , just a different notation.

2. How do you find the range, if you are given the domain?

Plug in the domain values to find the range.

3. How do you graph a function?

Make a table and pick at least 3 points to plug into the “ x ” and graph each ordered pair.



James Madison
HIGH SCHOOL

Write a Function Rule (Table)

Step:

1. Find a pattern. Think, “how did they get from x to y ?”
2. Write an equation from the pattern.
3. Check the equation for a couple of domain values.

1. 1.

x	y
1	5
2	6
3	7
4	8

$$y = x + 4$$

2.

x	y
1	2
2	4
3	6
4	8

$$y = 2x$$

3.

x	f(x)
1	1
3	9
6	36
9	81

$$f(x) = x^2$$



Write a Function Rule (Table)

1. 4.

x	y
1	-1
2	0
3	1
4	2

$$y = x - 2$$

5.

x	f(x)
1	3
2	6
3	9
4	12

$$f(x) = 3x$$

6.

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

$$y = -x - 4$$



James Madison
HIGH SCHOOL

Write a Function Rule (Situation)

Step:

1. Define your variables (2).
2. Write an equation according to the situation.
3. Check the equation.



James Madison
HIGH SCHOOL

Write a Function Rule (Situation)

Write a function rule for each situation.

7. The total cost $t(c)$ of c ounces of cinnamon if each ounce costs \$.79

$t(c)$ = total cost

c = ounces

$t(c) = \$.79c$



James Madison
HIGH SCHOOL

Write a Function Rule (Situation)

Write a function rule for each situation.

8. The height $f(h)$ of an object in feet when you know the height h in inches.

$f(h)$ = height in feet

h = height in inches

$f(h) = h/12$



James Madison
HIGH SCHOOL

Write a Function Rule (Situation)

Write a function rule for each situation.

9. The area $A(n)$ of a square when you know the length n of a side.

$A(n)$ = area of square

n = length of side

$$A(n) = n^2$$



James Madison
HIGH SCHOOL

Write a Function Rule (Situation)

Write a function rule for each situation.

10. In 2006, the price of mailing a letter was \$.39 for the first ounce or part of an ounce and \$.24 for each ounce or part of an ounce after the first ounce.

$t(c)$ = total cost

c = ounces

$$t(c) = \$.24(c - 1) + \$.39$$



James Madison HIGH SCHOOL Wrap Up

- Writing a Function Rule
 - From a table
 - From a situation
- Always check your equation to see if it makes sense!