

“What’s My Rule?”

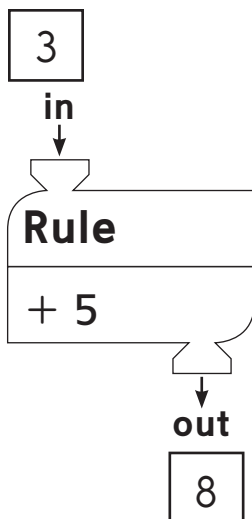
Family Note

Today your child learned about a kind of problem you may not have seen before. We call it a “What’s My Rule?” problem. Please ask your child to explain it to you.

Background information: Imagine a machine with an input funnel on top and an output tube at the bottom. The machine is programmed so that if you drop a number into the funnel, the machine does something to the number, and a new number comes out of the tube. *For example:* The machine is set to add 5 to any input number. If you put in 3, 8 comes out. If you put in 7, 12 comes out.

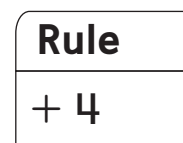
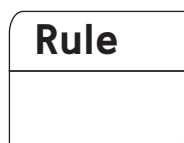
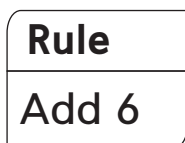
We call this device a function machine.

You can show the results of the rule “+ 5” in a table:



in	out
3	8
7	12
15	20

In a “What’s My Rule?” problem, some of the information is missing. To solve the problem, you have to find the missing information, which could be the numbers that come out of a function machine, the numbers that are dropped in, or the rule for programming the machine. *For example:*



in	out
3	
5	
8	

Missing: out numbers

in	out
6	3
10	7
16	13

Missing: rule

in	out
	6
	16
	11

Missing: in numbers numbers

Like Frames-and-Arrows problems, “What’s My Rule?” problems help children practice facts (and other addition and subtraction problems in a problem-solving format.

Please return the second page of this Home Link to school tomorrow.

“What’s My Rule?”

(continued)

Give the Family Note to someone at home. Show that person how you can complete “What’s My Rule?” tables. Show that person how you can find rules.

① Fill in the table.

	in	out
	1	10
	4	13
Rule		
+ 9	6	
	8	
	5	

② Fill the rule.

	in	out
	10	2
	12	4
Rule		
	9	1
	14	6
	8	0

③ Fill in the table.

	in	out
	4	10
		12
Rule		
+ 6		9
		15
		6

Try This

④ Fill the rule and fill in the missing *in* and *out* numbers.

	in	out
	8	13
	4	9
Rule		
	13	
		10