

# “What’s My Rule?”

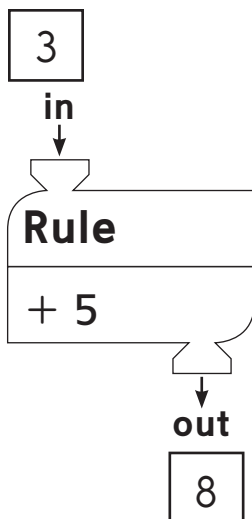
## Family Note

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.

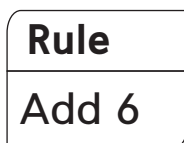
We call this device a function machine.

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



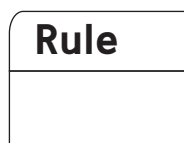
in	out
3	8
7	12
15	20

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:*



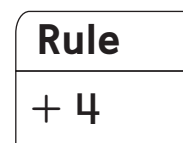
in	out
3	
5	
8	

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
<b>Rule</b>		
+ 9	6	
	8	
	5	

② Fill the rule.

	in	out
	10	2
	12	4
<b>Rule</b>		
	9	1
	14	6
	8	0

③ Fill in the table.

	in	out
	4	10
		12
<b>Rule</b>		
+ 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
<b>Rule</b>		
	13	
		10