"What's My Rule?"

Family Note

Ask your child to explain what the function machine is doing to the "in" numbers before he or she fills in the missing "out" numbers. For example, in the first problem, the function machine is adding 1 to each of the "in" numbers.

Also included in this Home Link are more Fact Triangles. This set of Fact Triangles includes three blanks. Fill them with whatever facts your child would like to practice more.

Please return this Home Link to school tomorrow.

Fill in the missing rule and numbers.

MRB
56-58

1 in → Rule → out

in	out
6	7
14	15
13	14
19	
9	

Your turn: ____

2 in → Rule → out

in	out
10	8
7	5
16	14
12	
11	

Your turn: ____

3 in → Rule → out

in	out
10	3
7	0
16	9
12	
11	

Your turn: ____

Practice

Solve.

4 $4 + \underline{\quad} = 8$

5 $10 = 6 + \underline{\quad}$
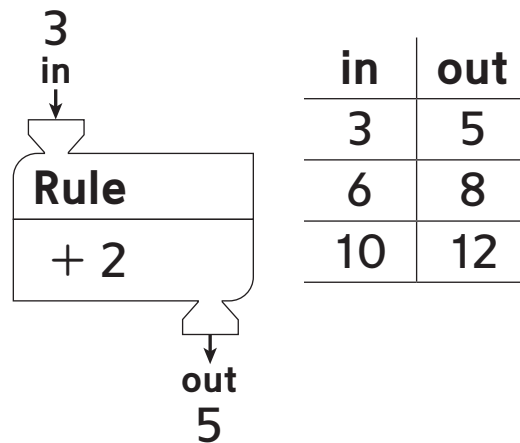
6 $\underline{\quad} = 8 - 1$

Family Letter

"What's My Rule?"

Today your child learned about a kind of problem you may not have seen before. We call it "What's My Rule?" Please ask your child to explain it to you. Here is a little background information you might find useful.
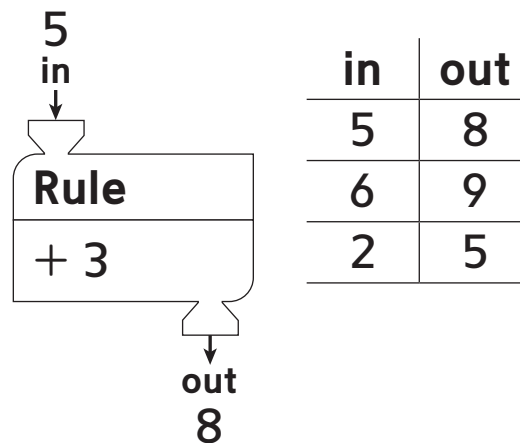
Imagine a machine that has a funnel at the top and a tube at the bottom—we call this a *function machine*. The function machine can be programmed so that when you drop a number into the funnel at the top, the machine changes the number according to the rule and a new number comes out of the tube at the bottom.

For example, you can program the machine to add 2 to any number that is dropped into the funnel. If you put in 3, out comes 5; if you put in 6, out comes 8.
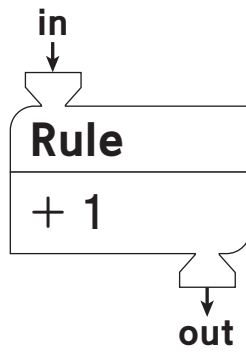
You can show this with a table:

3
in
↓

Rule

+ 2

out
5

in	out
3	5
6	8
10	12

Here is another example of a function machine:

5
in
↓

Rule

+ 3

out
8

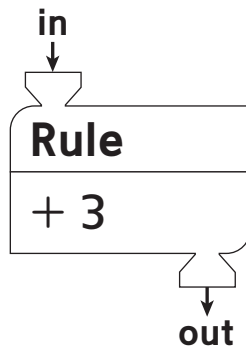| in	out
5	8
6	9
2	5

In a "What's My Rule?" problem, some of the information is missing. To solve the problem, you have to find the missing information. The missing information can be the numbers that are dropped in, the numbers that come out, or the rule for programming the machine. *For example:*
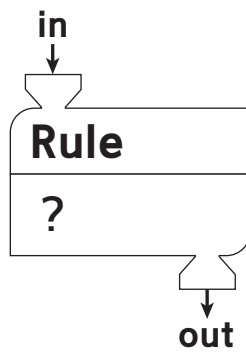
in	out
3	
5	
8	

Rule
+ 1

Missing "out" numbers

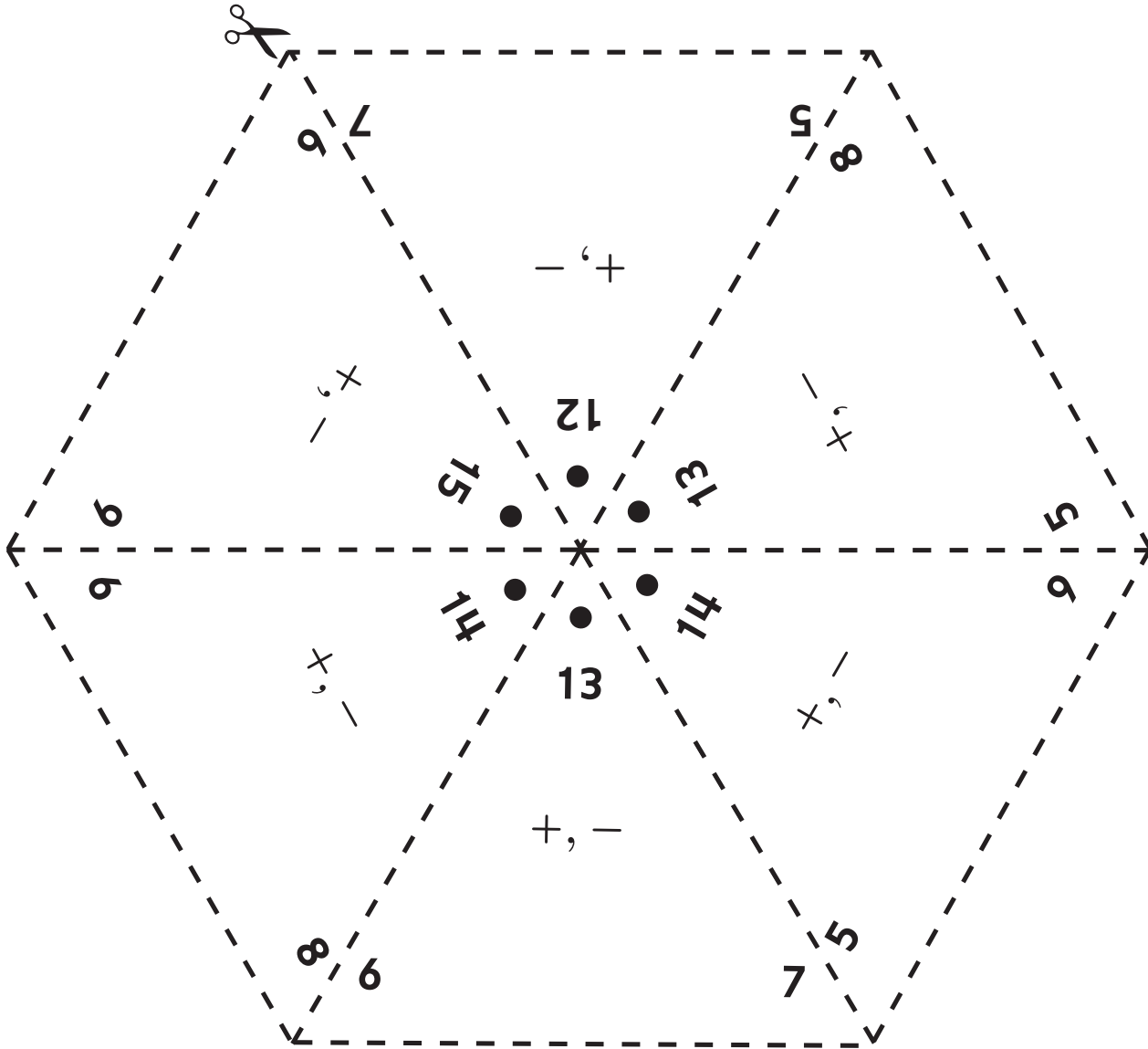| in	out
	6
	8
	10

Rule
+ 3

Missing "in" numbers

in	out
6	4
10	8
12	10

Rule
?

Missing rule

Fact Triangles 9

Cut out the triangles to use for addition and subtraction fact practice.

Fact Triangles 10