

Function Machines

Practice — ANSWER KEY

Bigger numbers — and times, not just plus.

Think: The rule might multiply. Try: does OUT = IN doubled? tripled?

1. Guess my rule. Fill the blanks, then write the rule.

Machine A

IN ($\triangle$)	$\rightarrow$	OUT ($\square$)
10	$\rightarrow$	20
4	$\rightarrow$	8
7	$\rightarrow$	14
8	$\rightarrow$	16
9	$\rightarrow$	18

Rule: $\square = \triangle \times 2$

Machine B

IN ($\triangle$)	$\rightarrow$	OUT ($\square$)
9	$\rightarrow$	0
22	$\rightarrow$	13
11	$\rightarrow$	2
19	$\rightarrow$	10
15	$\rightarrow$	6

Rule: $\square = \triangle - 9$

Machine C

IN ($\triangle$)	$\rightarrow$	OUT ($\square$)
10	$\rightarrow$	4
17	$\rightarrow$	11
12	$\rightarrow$	6
21	$\rightarrow$	15
16	$\rightarrow$	10

Rule: $\square = \triangle - 6$

Machine D

IN ($\triangle$)	$\rightarrow$	OUT ($\square$)
12	$\rightarrow$	6
11	$\rightarrow$	5
17	$\rightarrow$	11
13	$\rightarrow$	7
14	$\rightarrow$	8

Rule: $\square = \triangle - 6$