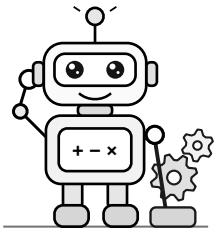
Name : _____ Date : _____

PAPILUMO / 3rd Grade (ages 8–9) • Answer key

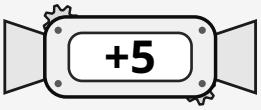
Input-Output Tables: Math Machines

Apply each machine's rule to find the missing output, or work backward from the output to uncover the missing input.



Romi the robot pulls the levers on four math machines! Check the rule screen carefully before filling each box.

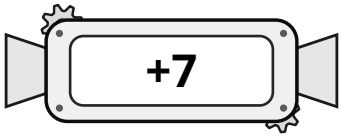
Worked example (+5 machine):



4 → 9	11 → 16	15 → 20
4 + 5 = 9	11 + 5 = 16	**20 − 5 = 15**

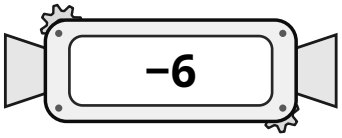
1. Complete all four input-output tables (watch out: one input is missing in every machine!):

A Machine A · Add 7



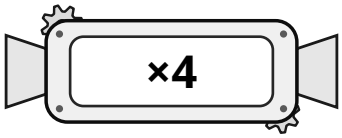
Input	→	Output
6	→	13
14	→	21
25	→	32
38	→	45

B Machine B · Subtract 6



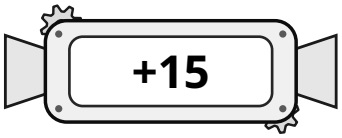
Input	→	Output
15	→	9
24	→	18
33	→	27
52	→	46

C Machine C · Multiply by 4



Input	→	Output
3	→	12
7	→	28
9	→	36
12	→	48

D Machine D · Add 15



Input	→	Output
12	→	27
24	→	39
48	→	63
65	→	80

Romi's tip: when an input is missing, flip the rule and work backward from the output (− instead of +, + instead of −, ÷ instead of ×).