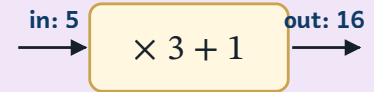


## Tables of values – input → output

MODULE 8 · ALGEBRA – PATTERNS, EXPRESSIONS AND EQUATIONS ALGEBRA

A **table of values** shows what a rule does. The rule is a **function machine**: a number goes in, the rule is applied, a new number comes out.



→ Rule ' $\times 3 + 1$ ': Input 1 → output 4. Input 2 → 7. Input 5 → 16.

### HOW TO ANSWER TODAY

- **Function machine.** Do EACH step of the rule in order to the input.

Rule  $\times 4 + 2$ , input 5 →  $5 \times 4 = 20$ ,  $+ 2 = 22$

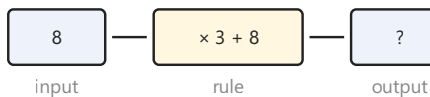
### WARM-UP

The first two outputs apply the rule ' $\times 3 + 1$ '. Apply the same rule to the rest.

	Output
a. 1	4
b. 2	7
c. 3	<input type="text"/>
d. 5	<input type="text"/>
e. 10	<input type="text"/>
f. 20	<input type="text"/>
g. 100	<input type="text"/>

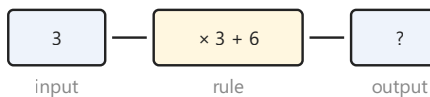
### PRACTICE

1



Múinteoir draws a function machine on the whiteboard during 5th class maths. The rule on the machine is  $\times 3 + 8$ . Saoirse puts in the number 8. What number comes out?

2



Cian and his friends play a lunchtime soccer match in the schoolyard. They score 3 goals using a rule for points: multiply the goals by 3, then add 6 bonus points for fair play. How many points do they get in total?