

Finding the rule from a table

MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

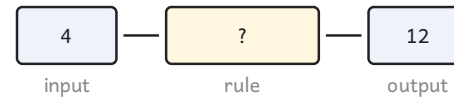
ALGEBRA

HOW TO ANSWER TODAY

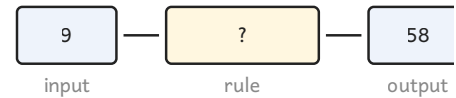
- **Find the rule.** Look at how each input changes to its output. Try $\times$ first, then $+$ or $-$.
 $3 \rightarrow 6$, $5 \rightarrow 10$, $7 \rightarrow 14 \rightarrow$ rule is $\times 2$

STRETCH PROBLEMS

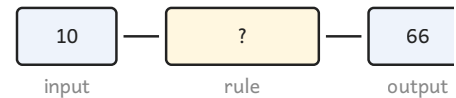
- 1 Saoirse is helping decorate the classroom noticeboard for World Book Day. She notices that **4** book cut-outs need **12** paper stars, **7** book cut-outs need **18** paper stars, and **6** book cut-outs need **16** paper stars. What is the rule that maps the number of book cut-outs to the number of paper stars?



- 2 Cian is selling raffle tickets for the 5th class GAA fundraiser. Each book of tickets costs the same in euros, plus a fixed booklet fee added to every order. His sales notebook shows: **9** books $\rightarrow$ **€58**; **6** books $\rightarrow$ **€40**; **8** books $\rightarrow$ **€52**. What is the rule linking the number of books to the total cost?



- 3 Aoife is on the 5th class school tour to the Cliffs of Moher in Clare. She spots a number machine that turns **10** into **66**, **2** into **18** and **1** into **12**. What rule does the machine use to map each input to its output?



- 4 Saoirse is packing biscuits for a sleepover. She packs **31** biscuits for **8** friends, **22** biscuits for **5** friends and **16** biscuits for **3** friends. What is the rule that maps the number of friends to the number of biscuits?



- 5 Cian tests a number machine in 5th class maths. The machine maps **9** to **46**, **10** to **51** and **8** to **41**. What is the rule that maps each input to its output?

