

Finding the rule from a table

MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

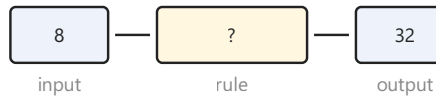
HOW TO ANSWER TODAY

- **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



Mr Ó Broin is in the photocopier room getting worksheet packs ready for tomorrow. For each pupil, he prints a set number of sheets and then adds the same number of extra cover sheets to the pile. The pile sizes go $8 \rightarrow 32$, $3 \rightarrow 17$ and $7 \rightarrow 29$ pupils to total sheets. What is the rule that turns the number of pupils into the total number of sheets?

2



Ms Murphy is decorating the 5th class room for World Book Day. For every shelf she fills with books, she pins up a fixed number of bunting flags around the room. She notices a pattern between books used and total decorations: $10 \rightarrow 23$, $6 \rightarrow 19$, $3 \rightarrow 16$. What is the rule?

3



At break time in 5th class, Niamh shares out biscuits from a packet. For every group that comes to her table, she gives them 14 more biscuits than the number of children in the group. When 4 children come, she gives 18 biscuits; when 2 come, she gives 16 ; when 9 come, she gives 23 . What is the rule she is using?