Growing and shrinking patterns; predict the next terms

MODULE 10 · ALGEBRA — PATTERNS, RULES AND NUMBER SENTENCES ALGEBRA

HOW TO ANSWER TODAY

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

STRETCH PROBLEMS

1 Cian saves **€19** in January, **€25** in February, **€31** in March and **€37** in April from his pocket money. He adds the same amount each month. How much will he have saved by the end of May?

> What comes next in the sequence: 19, 25, 31, 37, ___ ?

2

Tadhg's mam adds the same number of grapes to his lunchbox each day, on top of whatever crackers he packs. On Monday he packs **6** crackers and ends up with **17** items; on Tuesday he packs **8** crackers and has **19** items; on Wednesday he packs **1** cracker and has **12** items. What is the rule that takes the number of crackers to the total number of items?