Number patterns and sequences — find the rule

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. At the Cumann na mBunscol blitz, 3rd class are counting how many supporters arrive at the county grounds each ten minutes. The first four counts are **5**, **15**, **25**, **35**. If the pattern continues, how many supporters arrive in the next ten minutes?

   > What comes next in the sequence: 5, 15, 25, 35, ___ ?

2.

   Sean and his friends play a soccer match in the schoolyard at lunchtime. Each team starts with **10** bonus points before the match begins, then adds the goals they score. The scoreboard shows: **8** goals → **18** points, **3** goals → **13** points, **7** goals → **17** points. What is the rule that turns the number of goals into the team's points?