Growing and shrinking patterns; predict the next terms

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

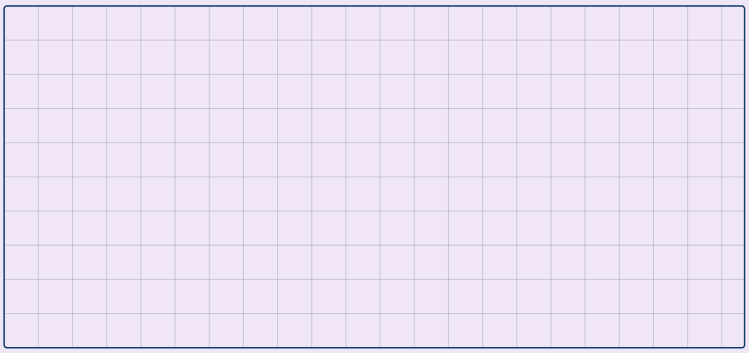
HOW TO ANSWER TODAY

- **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

TRY IT ON THE LINE

Continue and describe each pattern.

Patterns



1. Draw the next three shapes in the pattern.
2. Describe the rule of the pattern in words.
3. Make your own repeating pattern and swap to read a friend's.

PRACTICE

1

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?

2 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, ___ ?