

FIND THE RULE FOR 4, 7, 10, 13

- 1 Look at the first term: position 1 gives 4.
- 2 Try multiply by 3 then add 1: 1 times 3 is 3, plus 1 is 4.
- 3 Check next: 2 times 3 is 6, plus 1 is 7.
- 4 The rule works for every term.

PRACTICE

- 1 In a board game the scores start at 4 then go 7, 10, 13. What score is the 5th turn? _____
- 2 Players collect tokens: 6, 11, 16, 21 on turns 1 to 4. How many on turn 6? _____
- 3 In a card game points are 5, 8, 11, 14 for rounds 1–4. What points in round 8?

- 4 A video game level scores: 7, 17, 27, 37. What is the score on level 10? _____
- 5 A puzzle game gives points 3, 8, 15, 24 after each stage. What after stage 7? _____

? ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. Every number pattern with a constant step has a multiply-and-add rule that works for all terms. ☐
- b. The rule for 4, 7, 10, 13 works for the 100th term. ☐
- c. A pattern like 1, 2, 4, 7 needs only a multiply step with no add. ☐
- d. Two different rules give the same first three terms. ☐



x y



ALGEBRA



x y

