SEQUENCES
ARITHMETIC SEQUENCES: BASICS

Ref: G291.**3R1**

A1 Find the next two terms 2, 5, 8, 11, …	**A2** Find the next two terms 11, 8, 5, 2, …	**A3** Find the next two terms 9, 13, 17, 21, …	**A4** Find the next two terms 23, 14, 5, –4, …
B1 Find the 20th term 11, 14, 17, 20, …	**B2** Find the 30th term 5, 13, 21, 29, …	**B3** Find the 45th term 2, 7, 12, 17, …	**B4** Find the 51st term 30, 23, 16, 9, …
C1 Find the first three terms nth term $= 3n + 4$	**C2** Find the first four terms nth term $= 2n + 7$	**C3** Find the first three terms nth term $= 7n - 5$	**C4** Find the first five terms nth $term = 11 - 3n$
D1 Find the nth term formula 3, 11, 19, 27, …	**D2** Find the nth term formula 7, 11, 15, 19, …	**D3** Find the nth term formula 4, 5, 6, 7, …	**D4** Find the nth term formula 39, 33, 27, 21, …

Worksheets, Videos, Interactive Quizzes and Exam Solutions

SEQUENCES
ARITHMETIC SEQUENCES: BASICS

A1 Find the next two terms
2, 5, 8, 11, $14, 17$
$(+3)$

A2 Find the next two terms
11, 8, 5, 2, $-1, -4$
(-3)

A3 Find the next two terms
9, 13, 17, 21, $25, 29$
$(+4)$

A4 Find the next two terms
23, 14, 5, –4, $-13, -22$
(-9)

B1 Find the 20th term
11, 14, 17, 20,
$(+3)$
$11 + 19 \times 3 = 68$

B2 Find the 30th term
5, 13, 21, 29,
$(+8)$
$5 + 29 \times 8 = 237$

B3 Find the 45th term
2, 7, 12, 17,
$(+5)$
$2 + 44 \times 5 = 222$

B4 Find the 51st term
30, 23, 16, 9,
(-7)
$30 + 50 \times (-7) = -320$

C1 Find the first three terms
nth term $= 3n + 4$
$3(1) + 4 = 7$
$3(2) + 4 = 10$
$3(3) + 4 = 13$

C2 Find the first four terms
nth term $= 2n + 7$
$2(1) + 7 = 9$
$2(2) + 7 = 11$
$2(3) + 7 = 13$
$2(4) + 7 = 15$

C3 Find the first three terms
nth term $= 7n - 5$
$7(1) - 5 = 2$
$7(2) - 5 = 9$
$7(3) - 5 = 16$

C4 Find the first five terms
nth $term = 11 - 3n$
$11 - 3(1) = 8$
$11 - 3(2) = 5$
$11 - 3(3) = 2$
$11 - 3(4) = -1$
$11 - 3(5) = -4$

D1 Find the nth term formula
3, 11, 19, 27,
$(+8)$
$8n = 8, 16, 24, 32, \dots$
$\therefore 3, 11, 19, 27,$ is $8n - 5$

D2 Find the nth term formula
7, 11, 15, 19,
$(+4)$
$4n = 4, 8, 12, 16, \dots$
$\therefore 7, 11, 15, 19$ is $4n + 3$

D3 Find the nth term formula
4, 5, 6, 7,
$(+1)$
$(1)n = 1, 2, 3, 4, \dots$
$\therefore 4, 5, 6, 7$ is $n + 3$

D4 Find the nth term formula
39, 33, 27, 21,
(-6)
$-6n = -6, -12, -18, \dots$
$\therefore 39, 33, 27, \dots$ is $-6n + 45$
$= 45 - 6n$

Worksheets, Videos, Interactive Quizzes and Exam Solutions