

KS3 – Sequences – Answers

Section A – Term-to-Term Rules

Q1

- a) 16, 19
- b) 4, 0
- c) 25, 30
- d) 7, 1

Q2

- a) Add 5
- b) Subtract 6
- c) Add 7
- d) Subtract 8

Q3

- a) 7, 12
- b) -9, -16
- c) 3, 9

Q4

- a) 32, 64
- b) 1, $\frac{1}{3}$
- c) 48, 96

Q5

- a) Multiply by 3
- b) Divide by 2
- c) Multiply by 4

Q6

- a) 25, 36
- b) 26, 37
- c) 27, 38

Q7

- 7, 13, 25

Section B – nth Term

Q8

- a) $3n$
- b) $5n$
- c) $3n + 1$
- d) $4n + 4$

Q9

- a) $4n + 2$
- b) $5n - 3$
- c) $7n + 4$
- d) $8n + 12$

Q10

- a) $15 - 3n$
- b) $25 - 5n$
- c) $9 - 2n$

Q11

- a) 43
- b) 82
- c) 1

Q12

- a) 6, 11, 16
- b) -1, 2, 5
- c) 16, 14, 12

Q13

- a) Yes. $4n + 1 = 41$ gives $n = 10$.
- b) No. $6n - 1 = 40$ gives $n = 41/6$, which is not a whole number.
- c) Yes. $5n + 3 = 63$ gives $n = 12$.

Q14

15th term

Q15

- a) 3

b) $3n + 3$