

1. (a) Write down the next term in this sequence.

5 9 13 17

.....
(1)

- (b) Describe the rule for continuing the sequence.

.....
.....
(1)

-
2. (a) Write down the next term in this sequence.

2 6 18 54

.....
(1)

- (b) Describe the rule for continuing the sequence.

.....
.....
(1)

-
3. (a) Write down the next term in this sequence.

256 128 64 32

.....
(1)

- (b) Describe the rule for continuing the sequence.

.....
.....
(1)

4. Write down the next two numbers in this sequence.

7 8 10 13

..... and
(1)

5. Write down the next two numbers in this sequence.

2 5 11 23

..... and
(1)

6. Here are the first five terms of a number sequence.

9 15 21 27 33

- (a) (i) Write down the next term of the number sequence.

.....
(1)

- (ii) Explain how you found your answer.

.....
(1)

302 is **not** a term in this number sequence.

- (b) Explain why.

.....
.....
(1)

7. Here are the first four terms of a number sequence.

8 12 16 20

- (a) (i) Write down the next term in the sequence.

.....
(1)

- (ii) Explain how you found your answer.

.....
(1)

- (b) Write down the 9th term in the sequence.

.....
(1)

Ricky says 1001 is in the sequence.

- (c) Explain why Ricky is wrong.

.....
.....
(1)

-
8. Here are the first 4 terms in a number sequence.

132 124 116 108

- (a) Write down the next two terms in this number sequence.

..... and
(1)

11 cannot be a term in this number sequence.

- (b) Explain why.

.....
(1)

9. Here are the first five terms of a number sequence.

3 8 13 18 23

- (a) Work out the 10th term of this number sequence.

.....
(2)

Here are the first four terms of another number sequence.

-2 4 10 16

- (b) Find **two** numbers that are in both number sequences.

.....
(2)

-
10. Here is a number sequence.

The rule for finding the next term is to add a , where a is an integer.

8 29

Work out the two missing terms.

..... and
(2)

11. (a) The first term of a sequence is -5
The rule for continuing the sequence.

Multiply by 4
then
Subtract 3

What is the second term of the sequence?

.....
(1)

- (b) Here is a rule for continuing a different sequence.

Add 4
then
Multiply by 2

The second term of this sequence is 20.
What is the first term?

.....
(2)

12. Here is a sequence

1 3 17 115

To find the next term the rule is

multiply by a and then subtract b , where a and b are integers.

Find the values of a and b .

$a = \dots\dots\dots$

$b = \dots\dots\dots$
(2)

13. Write down the next term in the sequence.

$2a + b$ $3a + 5b$ $4a + 9b$

$\dots\dots\dots$
(2)