



Name: _____ **Date:** _____ **Score:** _____ / 28

1 Here are the first four terms of a sequence.

3 6 12 24

- Write down the next term of the sequence.
- Write down the term-to-term rule of the sequence.

(2 marks)

Answer _____

2 Here is a sequence of numbers.

6, 11, 16, ____, 26

Work out the missing number.

(1 mark)

Answer _____

3 Here are the first four terms of a sequence.

0.5, 1, 1.5, 2

Write down the next two terms.

(2 marks)

Answer _____

4 Here are the first five square numbers.

1 4 9 16 25

- Write down the next square number after 25.
- Write down the 8th square number.

(2 marks)

Answer _____

5 Here are the first four terms of a sequence.

50, 44, 38, 32

- Write down the next two terms.
- Write down the rule for continuing the sequence.

(2 marks)

Answer _____

6 Matchsticks are used to make a row of squares. The table shows the number of matchsticks in the first three patterns.

Pattern number	1	2	3
Number of matchsticks	4	7	10

The pattern carries on in the same way.

- Work out the number of matchsticks in Pattern 4.
- Work out the number of matchsticks in Pattern 6.

(2 marks)

Answer _____

7 Here are the first five terms of a Fibonacci sequence.

2 3 5 8 13

- Write down the next term of the sequence.
- Describe the rule for finding the next term of the sequence.

(2 marks)

Answer _____

8 Here are the first five terms of a sequence.

3, 8, 13, 18, 23

Eli says, "The number 100 will be in this sequence."

Is Eli correct? Give a reason for your answer.

(2 marks)

Answer _____

9 Here are the first four cube numbers.

1 8 27 64

- Write down the next cube number after 64.
- Write down the 10th cube number.
- Explain why 200 is not a cube number.

(3 marks)

Answer _____

10 Here are the first four terms of a sequence.

14 11 8 5

- Work out the next two terms of the sequence.
- Write down the term-to-term rule of the sequence.

(3 marks)

Answer _____

11 Here are the first four terms of a sequence.

96 48 24 12

- Write down the next term of the sequence.
- Work out the 8th term of the sequence.

(3 marks)

Answer _____

12 Here are the first five triangular numbers.

1 3 6 10 15

- Describe how the sequence continues from one term to the next.
- Work out the next two terms of the sequence.

(3 marks)

Answer _____

13 The even numbers form the pattern

2, 4, 6, 8, ...

Write down the 12th number in this pattern.

(1 mark)

Answer _____

End of questions | Total 28 marks