Name:

Exam Style Questions

Sequences

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 286

Video 287

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

8 14 20 26

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

.....

(1)

(b) Explain how you found your answer.

.....

.....

(1)

---

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

2 5 8 11

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

.....

(1)

(ii) Explain how you found your answer.

.....

.....

(1)

The 40th term of the number sequence is 119.

(b) Work out the 41st term of the number sequence.

.....

(1)

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

11 15 19 23

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

.....

(1)

(ii) Explain how you found your answer.

.....

.....

(1)

The 100th term of the number sequence is 407.

(b) Work out the 99th term of the number sequence.

.....

(1)

---

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

7 10 13 16

Work out the difference between the 10th term and 15th term in the sequence.

.....

(2)

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

5 9 13 17 .....

.....

(1)

(b) Describe the rule for continuing the sequence.

.....

.....

(1)

---

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

2 6 18 54 .....

.....

(1)

(b) Describe the rule for continuing the sequence.

.....

.....

(1)

---

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

256 128 64 32 .....

.....

(1)

(b) Describe the rule for continuing the sequence.

.....

.....

(1)

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

7 8 10 13 ....

..... and .....

(1)

---

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

2 5 11 23 ....

..... and .....

(1)

---

10. 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)

11. 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)

---

12. 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)

13. 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)

---

14. 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)

15. (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)

16. 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 = ...

b = ...

(2)

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17. Write down the next term in the sequence.

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

.....

(2)