GCSE Exam Questions

Sequences | Algebra

GCSE Exam Questions: Sequences

1) **(a)** What is the rule to get from one term to the next?

5, 8, 11, 14

- -

(1)

(b) Find the first and fifth term for the sequence below.

$-5n + 2$

- -

(2)

(3 marks)

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2) **(a)** What is the 12th term in the sequence $2n - 20$?

- -

(1)

(b) If the last term in the same sequence is 180, how many terms are in the sequence?

- -

(2)

(3 marks)

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GCSE Exam Questions: Sequences

3)   Look at this sequence:

$$1, 2, 4, 8, 16$$

(a)   What is the common ratio in the above geometric sequence?

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(1)

(b)   What would be the 7th and 8th term for the sequence?

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(1)

(c)   A different geometric sequence is 2, a , 288.

Calculate the value of a.

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(3)

(6 marks)

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GCSE Exam Questions: Sequences Answers

		Question	Answer	Marks
1)	**(a)**	What is the rule to get from one term to the next? 5, 8, 11, 14	+ 3	**(1)**
	(b)	Find the first and fifth term for the sequence below. -5n + 2	-3 -23	**(1)** **(1)**
2) (a)		What is the 12th term in the sequence $2n$ - 20?	$2 \times 12 - 20 = 4$	**(1)**
	(b)	If the last term in the same sequence is 180, how many terms are in the sequence?	$2n - 20 = 180$ $2n = 200$ $n = 100$	**(1)** **(1)**
3)		Look at this sequence: 1, 2, 4, 8, 16		
	(a)	What is the common ratio in the above geometric sequence?	2	**(1)**
	(b)	What would be the 7th and 8th term for the sequence?	6th term = $16 \times 2 = 32$ 7th term = $32 \times 2 = 64$ 8th term = $64 \times 2 = 128$	 **(1)** **(1)**
	(c)	A different geometric sequence is 2, a, 288. Calculate the value of a.	$\dfrac{288}{a} = \dfrac{a}{2}$ $576 = a^2$ $24 = a$	**(1)** **(1)** **(1)**

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