



New Maths GCSE: A24 & A25 - Basic Quadratic Sequences

Name:

Date:

Which sequence has n th term?

$$n^2 + 1$$

A 1,4,9,16	B 1,4,7,10
C 4,9,16,25	D 2,5,10,17

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Which term is not in the sequence

$$2n^2$$

Final question

A 64	B 128
C 8	D 32

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

The n th term of a sequence is $2n^2$

Find the 4th term of the sequence.

What should go in the shaded box?

A) $24^2 = 576$	B) 32
C) 64	D) 8

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

The n th term of a sequence is $\frac{n(n-1)}{2}$. Questions provided by

Work out the first term of this sequence.

↗

What should go in the shaded box?

A) 5 **B)** $\frac{1}{2}$
C) 0 **D)** 1

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

The n th term of a sequence is $\frac{n(n-1)}{2}$. Questions provided by

Work out the 10th term of this sequence.

↗

What should go in the shaded box?

A) $\frac{n^2 - n}{2}$ **B)** 45
C) 90 **D)** 10n

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Find the n th term of this sequence

4 7 12 19 28

A $n^2 + 3$ B $n^2 - 3$
C $2n + 3$ D $2n^2 + 3$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Follow up Questions for Edexcel GCSE – June 2014 – Higher – Paper 2 (Calc) – Question 12b

The first 5 terms of the sequence $2n - n^2$ are:

1, 0, -3, -8, -15

What is the expression for the sequence whose first 5 terms are:

3, 0, -9, -24, -45

A) $6n - n^2$ **B)** $3n$
C) $6n - 3n^2$ **D)** $3n - n^2$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

What is the 20th term in the sequence defined by

$$u_n = n^2 - 1 ?$$

(A) 19
 (B) 39
 (C) 399
 (D) 400

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

This pattern has been taken from the wonderful visualpatterns.org

What is the nth term rule for the total number of squares?

A $n^2 + 1$ **B** $4n - 2$

C $4n^2 + 1$ **D** $n^2 + n$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

This pattern has been taken from the wonderful visualpatterns.org

What is the nth term rule for the number of helmets?

A $n(2n + 1)$ **B** $n + 7$

C $n(3n + 2)$ **D** $n(3n)$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....