

Delta 3 – Unit 2 Revision Questions

Q1.

Here are the first 7 terms of a quadratic sequence.

3 6 11 18 27 38 51

(a) Find the next term in this sequence.

.....
(1)

The n th term of a different sequence is $2n^2 + 5$

(b) Work out the 6th term of this sequence.

.....
(1)
(Total for question = 2 marks)

Q2.

Here are the first four terms of a quadratic sequence.

3 8 15 24

(a) Find an expression, in terms of n , for the n th term of this sequence.

.....
(3)

The n th term of a different sequence is $2^n + 5$

(b) Show that 36 is **not** a term of this sequence.

.....
(1)
(Total for question = 4 marks)

Q3.

Here are the first 5 terms of a quadratic sequence.

1 3 7 13 21

Find an expression, in terms of n , for the n th term of this quadratic sequence.

.....
(Total for question is 3 marks)

Q4.

Make x the subject of $4x - 3 = 2(x + y)$

$x = \dots\dots\dots$
(Total for Question is 6 marks)

Q5.

(a) Expand and simplify $(5x + 2)(2x - 3)$

.....
(2)

(b) Factorise $x^2 + 4x + 3$

.....
(2)
(Total for question = 4 marks)

Q6.

(a) Expand $4(3x + 5)$

(1)

(b) Expand and simplify $2(x - 4) + 3(x + 5)$

(2)

(c) Expand and simplify $(x + 4)(x + 6)$

(2)
(Total for Question is 5 marks)

Q7.

Factorise $x^2 + 3x - 4$

(Total for question is 2 marks)

Q8.

Factorise $x^2 - 16$

(Total for question is 1 mark)

Q9.

Factorise $x^2 + 3x - 4$

.....

(Total for question is 2 marks)

Q10.

Solve $x^2 + 2x - 35 = 0$

.....

(Total for question = 7 marks)

Q11.

Solve $x^2 + 5x - 24 = 0$

(Total for question = 3 marks)

Q12.

Solve $2x^2 + 5x - 3 = 0$

(Total for Question is 3 marks)