Solutions – Quadratic Sequences (A)

Find the next two terms of the sequence –3, 1, 7, 15, 25, ...

37, 51

The nth term of a sequence is $2n^2 + n + 4$. Which term equals 140?

8

Find the nth term of the sequence 1, 3, 3, 1, –3, ...

$-n^2 + 5n - 3$

Find the nth term of the sequence 3, 5, 9, 15, 23, ...

$n^2 - n + 3$

Solutions – Quadratic Sequences (B)

Find the nth term of the sequence –5, –9, –17, –29, –45, ...

$-2n^2 + 2n - 5$

The nth term of a sequence is $2n^2 - 3n + 3$. Which term equals 173?

10

Find the nth term of the sequence 1, 11, 25, 43, 65, ...

$2n^2 + 4n - 5$

Find the next two terms of the sequence 10, 18, 28, 40, 54, ...

70, 88

Solutions – Quadratic Sequences (C)

Find the nth term of the sequence 4, 11, 22, 37, 56, ...

$2n^2 + n + 1$

Find the nth term of the sequence 7, 6, 1, –8, –21, ...

$-2n^2 + 5n + 4$

Find the next two terms of the sequence 0, 2, 6, 12, 20, ...

30, 42

The nth term of a sequence is $2n^2 + 5n - 2$. Find the 15th term.

523

Solutions – Quadratic Sequences (D)

The nth term of a sequence is $n^2 + 2n - 2$. Find the 20th term.

438

Find the next two terms of the sequence 5, 14, 27, 44, 65, ...

90, 119

Find the nth term of the sequence 10, 17, 26, 37, 50, ...

$n^2 + 4n + 5$

Find the nth term of the sequence −11, −21, −35, −53, −75, ...

$-2n^2 - 4n - 5$

Solutions – Quadratic Sequences (E)

Find the next two terms of the sequence 5, 14, 27, 44, 65, ...

90, 119

Find the nth term of the sequence 3, 10, 19, 30, 43, ...

$n^2 + 4n - 2$

The nth term of a sequence is $n^2 + 4n + 1$. Find the 17th term.

358

Find the nth term of the sequence –6, –11, –20, –33, –50, ...

$-2n^2 + n - 5$

Solutions – Quadratic Sequences (F)

Find the nth term of the sequence –1, 0, 3, 8, 15, ...

$n^2 - 2n$

Find the next two terms of the sequence 4, 5, 8, 13, 20, ...

29, 40

Find the nth term of the sequence 6, 8, 8, 6, 2, ...

$-n^2 + 5n + 2$

The nth term of a sequence is $n^2 - 4$. Find the 16th term.

252

Solutions – Quadratic Sequences (G)

The nth term of a sequence is $2n^2 + 3n - 4$. Which term equals 491?

15

Find the nth term of the sequence 3, 7, 15, 27, 43, ...

$2n^2 - 2n + 3$

Find the next two terms of the sequence 5, 10, 17, 26, 37, ...

50, 65

Find the nth term of the sequence –4, –13, –28, –49, –76, ...

$-3n^2 - 1$

Solutions – Quadratic Sequences (H)

Find the nth term of the sequence 5, 13, 23, 35, 49, ...

$n^2 + 5n - 1$

The nth term of a sequence is $n^2 + 4n + 4$. Find the 15th term.

289

Find the next two terms of the sequence 5, 10, 17, 26, 37, ...

50, 65

Find the nth term of the sequence 6, 2, –8, –24, –46, ...

$-3n^2 + 5n + 4$

Solutions – Quadratic Sequences (I)

Find the nth term of the sequence 2, –3, –14, –31, –54, ...

$-3n^2 + 4n + 1$

The nth term of a sequence is $n^2 + n + 1$. Find the 21th term.

463

Find the next two terms of the sequence 6, 12, 20, 30, 42, ...

56, 72

Find the nth term of the sequence 5, 12, 21, 32, 45, ...

$n^2 + 4n$

Solutions – Quadratic Sequences (J)

Find the next two terms of the sequence 0, 2, 6, 12, 20, ...

30, 42

Find the nth term of the sequence –6, –12, –22, –36, –54, ...

$-2n^2 - 4$

Find the nth term of the sequence –5, 0, 11, 28, 51, ...

$3n^2 - 4n - 4$

The nth term of a sequence is $n^2 + 5$. Find the 16th term.

261