Solutions – Arithmetic Sequences (A)

Find the *n*th term of the sequence 0, −2, −4, −6, ...

−2*n* + 2

The *n*th term of a sequence is 5*n* − 4. Which term equals 121?

25

Find the *n*th term of the sequence 2, −1, −4, −7, ...

−3*n* + 5

Find the next two terms of the sequence −2, 1, 4, 7, ...

10, 13

Find the next two terms of the sequence −5, −9, −13, −17, ...

−21, −25

The *n*th term of a sequence is −4*n* + 16. Which term equals −52?

17

Solutions – Arithmetic Sequences (B)

Find the nth term of the sequence $1, -1, -3, -5, \ldots$

$-2n + 3$

The nth term of a sequence is $-2n + 5$. Which term equals -43?

24

The nth term of a sequence is $4n + 7$. Find the 13th term.

59

Find the nth term of the sequence $-1, 3, 7, 11, \ldots$

$4n - 5$

Find the next two terms of the sequence $15, 11, 7, 3, \ldots$

$-1, -5$

Find the next two terms of the sequence $7, 9, 11, 13, \ldots$

15, 17

Solutions – Arithmetic Sequences (C)

The nth term of a sequence is $4n - 8$. Find the 29th term.

108

Find the nth term of the sequence 0, 5, 10, 15, ...

$5n - 5$

Find the next two terms of the sequence 20, 25, 30, 35, ...

40, 45

Find the nth term of the sequence –3, –5, –7, –9, ...

$-2n - 1$

Find the next two terms of the sequence 13, 9, 5, 1, ...

–3, –7

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

27

Solutions – Arithmetic Sequences (D)

Find the next two terms of the sequence 3, 1, −1, −3, ...

−5, −7

The nth term of a sequence is $5n - 8$. Find the 25th term.

117

Find the next two terms of the sequence 3, 6, 9, 12, ...

15, 18

Find the nth term of the sequence 6, 4, 2, 0, ...

−2n + 8

Find the nth term of the sequence 3, 5, 7, 9, ...

2n + 1

The nth term of a sequence is $2n - 5$. Find the 21th term.

37

Solutions – Arithmetic Sequences (E)

Find the nth term of the sequence 6, 4, 2, 0, ...

$-2n + 8$

Find the next two terms of the sequence $-6, -10, -14, -18, ...$

$-22, -26$

The nth term of a sequence is $3n + 12$. Find the 19th term.

69

Find the nth term of the sequence $-6, -1, 4, 9, ...$

$5n - 11$

Find the next two terms of the sequence $-3, -5, -7, -9, ...$

$-11, -13$

The nth term of a sequence is $4n + 11$. Find the 11th term.

55

Solutions – Arithmetic Sequences (F)

The nth term of a sequence is $-4n + 2$. Find the 21th term.

-82

Find the next two terms of the sequence 3, 1, −1, −3, ...

$-5, -7$

Find the nth term of the sequence 13, 10, 7, 4, ...

$-3n + 16$

Find the next two terms of the sequence 10, 8, 6, 4, ...

2, 0

Find the nth term of the sequence 8, 11, 14, 17, ...

$3n + 5$

The nth term of a sequence is $4n + 4$. Find the 12th term.

52

Solutions – Arithmetic Sequences (G)

The nth term of a sequence is $-2n + 12$. Which term equals -42?

27

The nth term of a sequence is $2n - 11$. Which term equals 11?

11

Find the nth term of the sequence $-2, -5, -8, -11, \ldots$

$-3n + 1$

Find the next two terms of the sequence $18, 22, 26, 30, \ldots$

34, 38

Find the nth term of the sequence $-6, -9, -12, -15, \ldots$

$-3n - 3$

Find the next two terms of the sequence $-4, -8, -12, -16, \ldots$

$-20, -24$

Solutions – Arithmetic Sequences (H)

Find the nth term of the sequence 6, 9, 12, 15, ...

$3n + 3$

The nth term of a sequence is $-4n + 1$. Which term equals -103?

26

Find the next two terms of the sequence -3, 2, 7, 12, ...

17, 22

Find the nth term of the sequence -2, 2, 6, 10, ...

$4n - 6$

The nth term of a sequence is $-4n - 6$. Find the 20th term.

-86

Find the next two terms of the sequence 17, 15, 13, 11, ...

9, 7

Solutions – Arithmetic Sequences (I)

The nth term of a sequence is $5n - 5$. Which term equals 65?

14

Find the nth term of the sequence 10, 15, 20, 25, ...

$5n + 5$

Find the next two terms of the sequence 9, 5, 1, –3, ...

$-7, -11$

Find the next two terms of the sequence 16, 14, 12, 10, ...

8, 6

Find the nth term of the sequence 9, 11, 13, 15, ...

$2n + 7$

The nth term of a sequence is $-2n + 14$. Which term equals −20?

17

Solutions – Arithmetic Sequences (J)

The *n*th term of a sequence is $-2n + 1$. Which term equals -19?

10

Find the next two terms of the sequence 18, 14, 10, 6, ...

2, -2

Find the next two terms of the sequence 9, 5, 1, -3, ...

$-7, -11$

Find the *n*th term of the sequence 7, 4, 1, -2, ...

$-3n + 10$

Find the *n*th term of the sequence $-2, -5, -8, -11, ...$

$-3n + 1$

The *n*th term of a sequence is $3n - 10$. Which term equals 68?

26