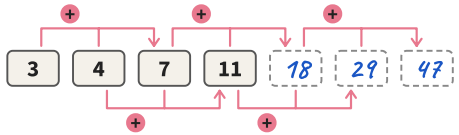
Fibonacci type sequences

ANSWERS

1

Each term is the sum of the two terms before it. Find the next three terms.



7 + 11 = 18

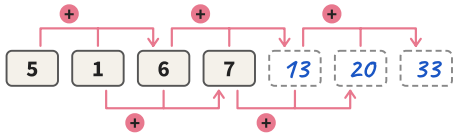
11 + 18 = 29

18 + 29 = 47

Next three 18, 29, 47

2

Each term is the sum of the two terms before it. Find the next three terms.



6 + 7 = 13

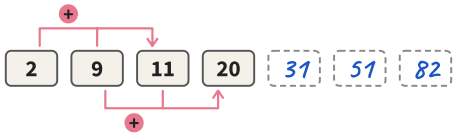
7 + 13 = 20

13 + 20 = 33

Next three 13, 20, 33

3

Each term is the sum of the two terms before it. Find the next three terms.



11 + 20 = 31

20 + 31 = 51

31 + 51 = 82

Next three 31, 51, 82

4

Each term is the sum of the two terms before it. Find the next three terms.

10 3 13 16 29 45 74

13 + 16 = 29

16 + 29 = 45

29 + 45 = 74

Next three 29, 45, 74

5

Each term is the sum of the two terms before it. Find the next three terms.

2.5 0.5 3 3.5 6.5 10 16.5

3 + 3.5 = 6.5

3.5 + 6.5 = 10

6.5 + 10 = 16.5

Next three 6.5, 10, 16.5

6

Each term is the sum of the two terms before it. Find the next three terms.

−3 5 2 7 9 16 25

2 + 7 = 9

7 + 9 = 16

9 + 16 = 25

Next three 9, 16, 25

7

Each term is the sum of the two terms before it. Find the first two terms.

3 7 10 17 27

17 − 10 = 7

10 − 7 = 3

First two 3, 7

8

Each term is the sum of the two terms before it. Find the missing terms.

6 9 15 24 39

15 − 6 = 9

9 + 15 = 24

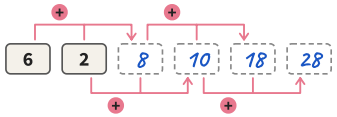
Missing terms 9 and 24

Fibonacci type sequences *further practice*

ANSWERS

9

The first two terms of a Fibonacci type sequence are 6 and 2. Write the first six terms.



Terms 6, 2, 8, 10, 18, 28

10

Maya reads 4 pages on Monday and 6 pages on Tuesday. Each day after that she reads as many pages as the two days before put together.
How many pages does she read on Friday?

4, 6, 10, 16, 26

Answer 26 pages

11

In a Fibonacci type sequence, the 4th term is 19 and the 5th term is 31.
Find the 1st term.

31 – 19 = 12, 19 – 12 = 7, 12 – 7 = 5

1st term 5

12

In a game, the points for each round are the total of the two rounds before. Zara scores 8 points in round 1 and 19 points in round 3. How many points does she score in round 5?

8, 11, 19, 30, 49

Answer 49 points

13

Each term is the sum of the two terms before it. Find the next three terms of

7, –2, 5, 3, …

5 + 3 = 8, 3 + 8 = 11, 8 + 11 = 19

Next three 8, 11, 19

14

The first two terms of a Fibonacci type sequence are x and 3. Write the next three terms. Simplify each one.

$x + 3$, $3 + (x + 3)$, $(x + 3) + (x + 6)$

Next three $x + 3$, $x + 6$, $2x + 9$

15

A Fibonacci type sequence starts with 4. Its 4th term is 25. Find the 2nd and 3rd terms.

$4 + 2x = 25$, $2x = 21$, $x = 10.5$

$4 + 10.5 = 14.5$

2nd and 3rd 10.5 and 14.5

16

Ali says 3, 5, 8, 12, 20 is a Fibonacci type sequence, because 8 + 12 = 20.
Is Ali right? Explain how you know.

5 + 8 = 13, not 12

Answer No