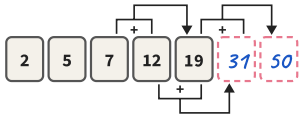


Fibonacci Type Sequences

ANSWERS

1

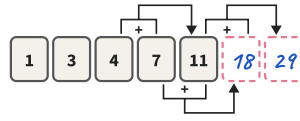
Each term is the sum of the two terms before it. Find the next three terms.



Next three 19, 31, 50

2

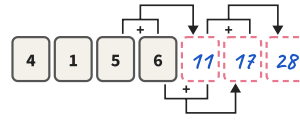
Each term is the sum of the two terms before it. Find the next three terms.



Next three 11, 18, 29

3

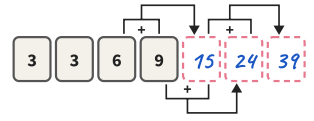
Each term is the sum of the two terms before it. Find the next three terms.



Next three 11, 17, 28

4

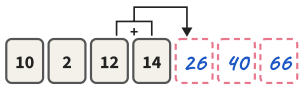
Each term is the sum of the two terms before it. Find the next three terms.



Next three 15, 24, 39

5

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



Next three 26, 40, 66

6

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



Next three 4, 6.5, 10.5

7

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



Missing term 7

8

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



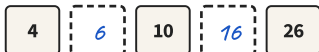
Missing term 4

Fibonacci Type Sequences *further practice*

ANSWERS

9

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



Missing 6 and 16

10

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



Next three 7, 9, 16

11

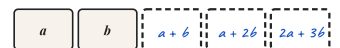
In this sequence each term is the sum of the three terms before it. Find the next two terms.



Next two 24, 44

12

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



Next three $a+b$, $a+2b$, $2a+3b$

13

Lena saves £4 in week 1 and some money in week 2. From week 3 on, each week she saves the total of what she saved in the two weeks before. In week 4 she saves £22. How much does she save in week 2?

$$\text{£}4, \text{£}x, \text{£}(4+x), \text{£}(4+2x)$$

$$4+2x=22$$

Answer £9

14

A mosaic has rows of tiles. Row 1 has 2 tiles and row 2 has 3 tiles. Each row after that has as many tiles as the two rows before it put together. How many tiles are there in the first 6 rows altogether?

$$2+3+5+8+13+21$$

Answer 52 tiles

15

In a game, Ana scores 1 point in round 1 and 4 points in round 2. Ben scores 2 points in round 1 and 3 points in round 2. In every later round, each player scores the total of their own scores in the two rounds before. Who scores more points in round 8?

$$\text{Ana: } 1, 4, 5, 9, 14, 23, 37, 60$$

$$\text{Ben: } 2, 3, 5, 8, 13, 21, 34, 55$$

Answer Ana (60 to 55)

16

The first two terms of a Fibonacci type sequence are both odd. Sam says the third term must be even. Is Sam right? Explain.

$$\text{odd} + \text{odd} = \text{even, for example } 3 + 5 = 8$$

Answer Yes