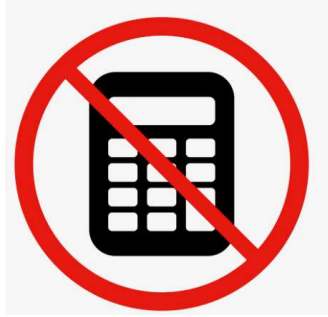


Question of the day

Day 5



(a) These are the first five terms in a Fibonacci sequence. ← add the 2 previous terms

1 3 4 7 11, 18

Write down the next two terms in the sequence.

$$7 + 11 = 18$$
$$11 + 18 = 29$$

(a) 18, 29 [1]

(b) In a different Fibonacci sequence the fourth term is 31 and the fifth term is 50.

To find the next term we add the 2 previous terms.
To find a previous term we need to subtract.

Work out the first term in this sequence.

7 12 19 31 50

$$\begin{aligned} 3\text{rd term} &= 50 - 31 = 19 \\ 2\text{nd term} &= 31 - 19 = 12 \\ 1\text{st term} &= 19 - 12 = 7 \end{aligned}$$

(b) 7, 12, 19 [2]

(c) The second and third terms in the following Fibonacci sequence are x and y .

Write down algebraic expressions for the first, fourth and fifth terms.

subtract ← → add

..... $y - x$ x y $x + y$ $y + x + y = 2y + x$ [3]

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