

Sequences *key words*

ANSWERS

A Fill in the missing words from the word bank.

Word bank

Two words are not needed.

~~arithmetic~~

~~difference~~

~~Fibonacci~~

~~geometric~~

~~multiply~~

~~nth term~~

~~position~~

~~previous~~

~~quadratic~~

~~sequence~~

~~square~~

~~term~~

~~term-to-term~~

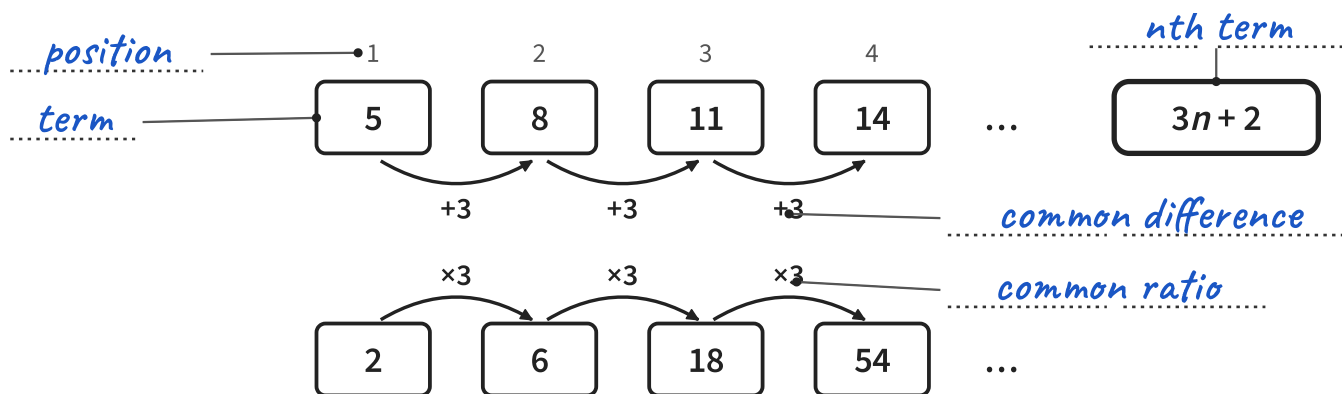
~~triangular~~

A sequence is a list of numbers that follow a rule. Each number in the list is called a term. The term-to-term rule tells you how to get from one term to the next: for 5, 8, 11, 14, ... it is add 3.

In an arithmetic sequence you add or subtract the same number each time. This number is the common difference. The rule $3n + 2$ gives any term from its position, so it is called the nth term.

In a geometric sequence such as 2, 6, 18, 54, ... you multiply by the same number each time. In a Fibonacci type sequence such as 1, 2, 3, 5, 8, ... you add the two previous terms to get the next one. The numbers 1, 4, 9, 16, 25, ... are the square numbers.

B Label the diagram. No word bank this time. Each label gives the first letter.



C Each sentence uses the wrong key word. Cross it out and write the right word.

1 For 4, 9, 14, 19, ... the nth term is add 5.

term-to-term

2 7, 14, 28, 56, ... is an arithmetic sequence because you multiply by 2 each time.

geometric

3 In 7, 11, 15, 19, ... the number 15 is the third position.

term

4 1, 1, 2, 3, 5, 8, ... is a geometric type sequence: each term is the sum of the two before it.

Fibonacci