

Find missing terms

H

- 1 Dora and Eva are finding missing terms in this sequence.
23, 32, 41 ...

Dora: The 6th term is 68 because you need to add 9 three more times from 41

Eva: The 6th term of this sequence is 82 because you need to double the 3rd term.

Who is correct? Explain how you know.

- 2 a) Find the next three terms of each sequence.

sequence A: 100, 92, 84, , ,

sequence B: 18, 35, 52, , ,

- b) Find the 10th term of each sequence without working out the terms in between.

sequence A:

sequence B:

- 3 a) What is the last positive term in the sequence 46, 37, 28 ...

The last positive term in the sequence is

- b) In which position is the first negative term?

- 4 Write the missing terms in each of these linear sequences.

a) 4, 16,

b) 4, , 16 ...

c) 4, , , 16 ...

d) 4, , , , 16 ...

e) 97, , , 82,

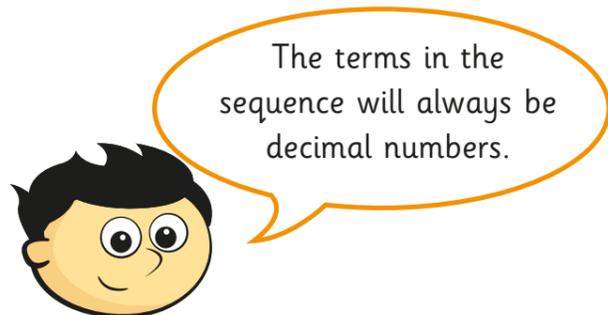
f) 4000, , , , 5200,

- 5 Write the missing terms in each of these non-linear sequences.

a) 1, 10, 100, 1000, ...

b) 500, 100, , 4 ...

6 A sequence starts 0.7, 1.4, 2.1 ...



Jack is incorrect.

a) Find the first integer term.

b) In which position will the first integer appear?

c) In which position will the second integer appear?

7 The 1st term of a linear sequence is 17
The 5th term of the sequence is 29
What is the 9th term of the sequence?

8 The 1st term of a sequence is 24. The 4th term is 192
Find the 2nd, 3rd and 5th term if the sequence is:

a) arithmetic

24, , , 192,

b) geometric

24, , , 192,

How many different sequences of any type can you create?

9 a) Write three different sequences that include both 2 and 10

b) Write three different sequences that include both 100 and 5

c) Compare answers with a partner.