



LINEAR SEQUENCES - nth TERM

Teacher notes

Learning objectives:

- 1) Be able to recognise linear sequences.
- 2) Understand what is meant by 'the nth term of a sequence'.
- 3) Be able to write down the nth term of any linear sequence.

Teacher presentation

The teacher presentation is designed as a focus for whole class teaching by providing:

- visual stimulation / animation to aid understanding
- structure for teacher-led discussion
- opportunities for thinking skills development

The activities on each slide are meant to be used by the teacher to help structure the questioning and class discussion.

The presentation is menu driven - an outline of each menu item is given below:

SEQUENCE GENERATOR

This sequence generator allows the teacher to show linear sequences and/or the nth term of the sequence.

New sequences can be generated at random and the differences between the terms can be revealed.

Questioning and discussion can focus on the relationship between the term number and the term of the sequence and on the significance of the differences.

QUESTIONS

This is also a random sequence generator.

The teacher could lead questioning, using this as a source of questions to assess understanding.

Linear sequences

Objectives:

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SEQUENCE GENERATOR MATCHING ACTIVITY

QUESTIONS MULTIPLE CHOICE

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slow random generate nth 1st 2nd 3rd 4th 5th 6th

slow random generate d

slow random generate d

Sequences and n^{th} term

What are the next two terms ?

9 19 29 39 ? ?

What is the nth term ?

n^{th} term = ? ?

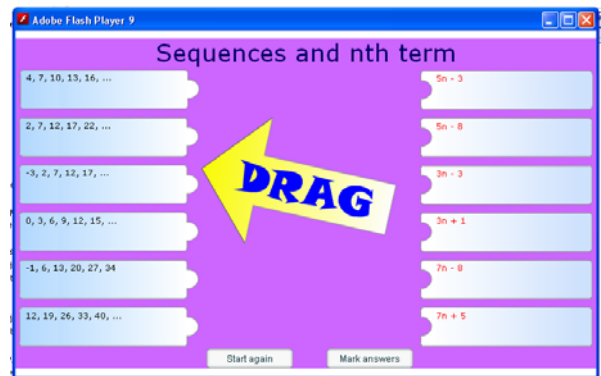
new

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MATCHING ACTIVITY

This activity could be used in the plenary.

Students could be invited to the board to match up each sequence with the correct nth term.



MULTIPLE CHOICE

This activity is included in the learning object (see below). It could also be used by the teacher to lead questioning and discussion in the plenary of the lesson.

Learning object

This is an interactive learning and assessment tool designed to engage students in solving problems related to the learning objectives.

This is meant to follow the teacher presentation and be used by students to consolidate learning and to practise applying their knowledge and understanding.

This activity includes:

- 5 questions where students need to find a term of a sequence, given the nth term.
- 2 questions where students need to match sequences with nth terms
- 8 questions where students need to find the nth term of sequences
- A multiple choice game – students can access this if they score at least 75% in the preceding questions.

