Work out the formula to these sequence of numbers. The answers are at the bottom of the page

1) 5, 11, 16, 21

2) 9, 11, 13, 15

3) 3, 9, 15, 21

4) 7, 10, 13, 16

National Curriculum Statement		All students	
	Fluency	**Reasoning**	

Algebra

Generate and describe linear number sequences.

Fluency

- Fill in the first two terms in this sequence.

  ___, ___, 55, 63, 71

  Can you write a formula to describe the sequence?

- 7 is the first term in this sequence. What is the 7th term?

  7, 12, 17,

- The formula 4n+1 can be used to generate the numbers in this sequence. Fill in the table below:

Term	Calculation	Value
1st	4 × 1 + 1	5
5th		
10th		41
20th	4 × 20 + 1	

Reasoning

- Write a formula for the 10th, 100th and nth terms of the sequences below.

  4, 8, 12, 16 ....

  0.4, 0.8, 1.2, 1.6, ...

- Here is a sequence:

  3, 8, 13, 18, 23

  Circle the formula that describes the sequence.

  4n - 1

  5n - 2

  3n + 5

  Explain your reasoning.

Answers

1) $6n - 1$
2) $2n + 7$
3) $6n - 3$
4) $3n + 4$