

SEQUENCES

Name: _____

Assessment Criteria: Generate terms of a sequence using term-to-term and position-to-term definitions of the sequence, on paper and using ICT; write an expression to describe the n th term of an arithmetic sequence.

1. Look at the following sequence of numbers.

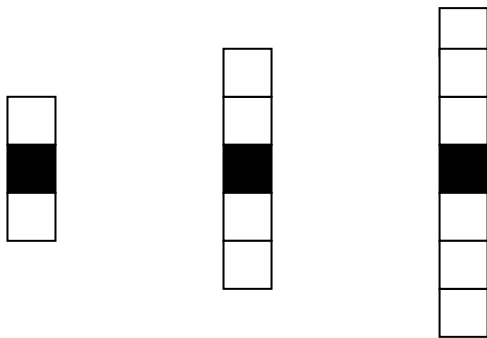
a) Complete the missing numbers

5, 12, 19, 26, ____, ____

b) What is the term-to-term rule? _____

c) What is the n^{th} term of the sequence? _____

2. Look at the following pattern.



Pattern 1

Pattern 2

Pattern 3

Pattern 4

a) Draw the next pattern in the sequence

b) How many white squares will the 10th Pattern have? _____

c) How many white squares will the n^{th} pattern have? _____

d) How many black squares will the n^{th} pattern have? _____

e) Write a formula for the n^{th} term of the pattern. _____

3. Write down the first 3 terms of the sequence with n^{th} term:

a. $T(n) = 4n - 2$

b. $T(n) = n^2 + 2$

Overall, I think my success level is:

Low	High
<input type="radio"/>	<input type="radio"/>
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Q	SEQUENCES	☺	☹
	I can describe a sequence using the term-to-term rule		
	I can write an expression to describe the n^{th} term of a linear sequence		
	I can generate terms of a sequence using the position-to-term rule		
	<i>I can solve problems and carry through substantial tasks by breaking them into smaller, more manageable tasks, using a range of efficient techniques, methods and resources, including ICT; give solutions to an appropriate degree of accuracy</i>		
I need to practise ...			