

Q1. Here are the first 5 terms of a number sequence.

2 5 8 11 14

(a) (i) Write down the next term in the sequence.

.....

(ii) Explain how you got your answer.

.....

.....

(2)

(b) Work out the 8th term in the sequence.

(1)

(Total 3 marks)

Q2. Here are the first 4 terms in a number sequence.

2 5 8 11

(a) Write down the next term in this number sequence.

.....

(1)

Here are the first 4 terms in another number sequence.

18 13 8 3

(b) Write down the next term in this number sequence.

.....

(1)
(Total 2 marks)

Q3. Here are the first 4 terms in a number sequence.

124 122 120 118

(a) Write down the next term in this number sequence.

.....

(1)

(b) Write down the 7th term in this number sequence.

.....

(1)

9 cannot be a term in this number sequence.

(c) Explain why.

.....

(1)
(Total 3 marks)

M1.

	Answer	Mark	Additional Guidance
(a)(i)	17	2	B1 for 17 cao
(ii)	add 3 (each time)		B1 for add 3 oe
(b)	23	1	B1 for 23 cao
Total for Question: 3 marks			

M2.

	Answer	Mark	Additional Guidance
(a)	14	1	B1 cao
(b)	-2	1	B1 cao
Total for Question: 2 marks			

M3.

	Answer	Mark	Additional Guidance
(a)	116	1	B1 for 116 [accept 114 if 116 seen on the dotted

			[line in the sequence]
(b)	112	1	B1 cao
(c)	it is odd (and all the terms are even)	1	B1 for a correct reason
Total for Question: 3 marks			

E1. A well understood question with a good success rate. Almost all candidates gained all 3 marks though some candidates did get muddled when finding the 8th term of the sequence.

E2. This question was extremely well done. A few gave more terms than was necessary in part (a) but were not penalised for this.

E3. The identification of subsequent terms in this sequence was usually correctly done. Some candidates wrote the next term (116) on the dotted line of the sequence and gave an answer of 114 in part (a). This was not penalised and the mark was awarded. Whilst in part (b) the correct answer of 112 was usually given, a few candidates found the seventh subsequent term (104) in error.

In part (c), the majority of candidates were awarded the mark for responses of “because they are all even” or “because 9 is an odd number”. Many candidates felt that it was sufficient just to say something like “because the numbers go down in 2’s”. This gained no credit.

Several candidates used the word ‘uneven’ to describe odd and ‘equal’ to describe even.