

## Topic Test 1 Mark Scheme

Sequences - Foundation

Q	Answer	Mark	Comments
1	777776222223	B1	
2	Evidence of cumulative total, ie 1, 3, 6, 10, 15, for at least 5 terms	M1	
	14	A1	
3(a)	Goes up by 6 each time	B1	
3(b)	-9	B1	
4	$\frac{7+12+17+22}{4}$ or $\frac{12+17}{2}$	M1	
	$14\frac{1}{2}$	A1	oe
<b>E</b> (a)	40	D1	
5(a)	21	B1 B1	
5(b)	21	וט	
6(a)	4, 11, 18	B1	
6(b)	7n - 3 = 109	M1	
	16	A1	
7(a)	46	B1	
7(b)	729	B1	
7(b)	729	B1	

Q	Answer	Mark	Comments
8	17 – 2 <i>n</i>	B1	
9	Two terms from the sequence 10 <i>n</i> + 1 ie two from 11, 21, 31, 41,	B2	B1 one correct term or lists at least the first three terms from both sequences ie 5, 7, 9, and 1, 6, 11,
10(a)	$a \times 1 + b = a + b$ and $b \times 1 + a = a + b$	B1	
10(b)	2a + b or $3b + a2a + b = 3b + a$ so $a = 2b$	M1 A1	