

2.12 - Sequences

			Stud	lent na	me:						Score:
1.	The	e first fiv	e term	ns of a s	sequence a						
	(a)	Write	down 1	the next	two term	s of the	seque	ence.			
											[1]
	(b)	Find th	ne nth	term of	the seque	ence.					
											[2]
2.	The	first fou	r term	s of a s	equence a	re 1, 3,	, 9,	27.			
	(a)	Write de	own tl	ne next	term of th	nis seque	ence.				
											[1]
	(b)	Find an	expre	ssion fo	or the nth	term of	this s	equenc	æ.		
											[2]
3.	The	first five	e term	s of a so	equence a	re					
					-2,	1,		6,		13,	22.
	(a)	Write d	own tl	ne next	term in th	ne seque	nce.				
											[1]
	(b)	Find an	expre	ssion, i	n terms o	f <i>n</i> , for t	he <i>n</i> tl	n term o	of the	e sequ	uence.
											[1]
4.	Fine	the nex	t two	terms ii	n this sequ	ience.					
		1,		2,	6,	15,		31,			
5.	The	se are the	e first f	four terr	ns of a sec	quence.					
						15	11	7	3		
	Find	1									
	(a)	the next	i term,								Г11
	<i>a</i> .	4141-4									[1]
	(b)	the nth t	erm.								
											[2]



6.	The	ese are th	ne first	five tern	ns of a seq	uence.							
				2	6		12	20	30				
	(a)	Find th	e next	term.									
								•••••		[1]			
	(b)	Find an	expres	ssion for	the <i>n</i> th te	rm.				Г Э Л			
7.	Find	I the next	term ir	n each of	these sequ	iences.		•••••		[3]			
	(a)	3,	5,	8,	12,	17,			[1]			
	(b)	100	01	90	67	52			r	11			
	(D)	100,	91,	80,	67,	32,			ι	[1]			
	(c)	4,	12,	36,	108,	324,]	1]			
8.	8. Find the next term in each of these sequences.												
	(a)	81,	77,	72,	66,	59,]	1]			
	(b)	3,	-6,	12,	-24,	48,			[1]			
	(c)	16,	8,	4,	2,	1,			[1]			
Q	Here	are the t	first fou	r terms o	of a sequen	Ce							
7.	TICIC	are the f	msi iou	i terms t	11		5	2					
	Writ	e down t	he next	term of t	he sequen	ce.							
								••••		[1]			
10.			6,	12,	24, 48,	96,							
	(a)	Write d	lown th	e next to	erm in the	sequence							
	(b)	Find th	a 8th ta	arm in th	ne sequenc			[1]					
	(D)	ring th	e our te	21111 III U	ie sequenc			[1]					
	(c)	Find a	n expre	ssion fo	r the <i>n</i> th to	erm of the	e sequence.			ro:			
										[2]			



11.	Fino	the <i>n</i> th tern	n of this sequ	ience	.							
			- 1,	,	0,		3,	8	,	1:	5,	[3]
12.	Her	e are the firs	t five terms of	of a s	equen	ce.						
			3		7	11	15	19				
	(a)	Write down	the next ter	m.								
	(b)	Find the <i>n</i> th	term of the	sequ	ence.							[1]
												[2]
13.	The	first 4 terms	of a sequenc	e are	e 20,	, 13,	6 and	d – 1.				
]	Find											
	(a)	the next terr	n,									543
	(b)	the n th term	1.									[1]
1.4	Hone	anatha finat	form towns o	fos								[2]
14.	пет	e are the first	Tour terms o	11 a S	-	ce.	_					
				_	11		8	5		2		
	Writ	te down the r	ext term of t	he se	equeno	ce.						[1]
15.	The	ese are the fir	st five terms	of a	seque	nce.						[]
				1	l	0	1	l	4		9	
	Fine	d the <i>n</i> th term	n of this sequ	ence) .							
16.	Her	e are the firs	t four terms	of a	seque	nce.						[2
						13	9	5		1		
	(a)	Write down	n the next ter	m.								
	(b)	Find an exp	pression in t	erms	s of n	for tl	he <i>n</i> th	term				[1]
	(~)	i ma an on	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, 01 //,	101 1						[2]
17.			27, 81,									
	Find	the <i>n</i> th tern	of this sequ	ience	Э.							[2]
							2					(Oakles
							- ≺					

18. He	re are tl	he first	five to	erms c	of a sec	quence					
	$\frac{1}{4}$	1	4	16	64						
(a)	Find	the nex	t term	l.							
										[1
(b)	Find	the <i>n</i> th	term.								
											2
19. Fin	d the ne	ext term	and a	n expi	ression	for the	nth ter	m of the	e followin	g sequence.	
		- 9,	-	3,	7,	21,	39,				
										:	
								n	th term =		:
20. The	ese are	the firs	t four	terms	in a se						
()	117 '4	1	.1			27	19	11	3		
(a)	write	down	tne ne	xt ten	m.						1
(b)	Find :	an evnr	ession	in te	erms o	fn for	the nth	term o	f the sequ		. 1
(6)	1 ma	ан схрг	CSSIOI	i, iii (C	71113 0.	1 11, 101	the nth	term o	r the sequ		2
21. Fin	d an ex	pressio	n for	the n	th tern	n of eac	ch sequ	ence.			
		7,									
(-)	-,	,	10,		1,	20,				[2
(b)	1	-2,	3		-4	5					
	-,	-,		,	٠,	٥,	•••			[2

