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Princeton, N. J. 08544
March 14, 1979

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AS210
AS211

f 91
N. J. A. Sloane
Bell Laboratories
600 Mountain Avenue
Murray Hill, N. J. 07974

Dear Dr. Sloane,

I've not corresponded with you in some time, and thought I would say hello and give you a few more sequences.

I look for the new edition of the Handbook whenever I'm in the University Store, but haven't seen it yet. Is it out?

I am now in my senior year at Princeton, and hope to attend graduate school in mathematics at either Berkeley or MIT. I should be hearing shortly about admission and fellowships.

Also, I recently noticed that sequence 1398 satisfies the formula

$$a_n = (n+1)2^n.$$

I'm unable to prove this from the definition given in Abramowitz and Stegun, but it seems quite unlikely it should hold for the first 19 terms but not thereafter! If so, the next few terms are: 10485760, 22020096, 46137344, 96468992.

I hope to hear from you soon.

Cordially yours,

Jeffrey Shallit

Jeffrey Shallit

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S211

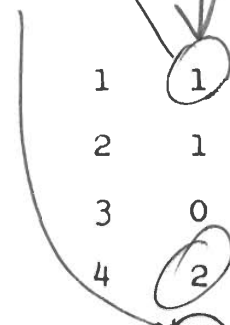
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Sequence 153.5 $a_n = |2a_{n-2} + a_{n-1} - n|$

Popular Computing v.4, no.9 (September, 1976) p.12-16

AS210

~~Omit~~



1	1	27	14	53	17	79	64	105	15	131	24
2	1	28	0	54	9	80	10	106	3	132	106
3	0	29	1	55	12	81	57	107	74	133	21
4	2	30	29	56	26	82	5	108	28	134	99
5	3	31	0	57	7	83	36	109	67	135	6
6	1	32	26	58	1	84	38	110	13	136	68
7	0	33	7	59	44	85	25	111	36	137	57
8	6	34	25	60	14	86	15	112	50	138	55
9	3	35	4	61	41	87	22	113	9	139	30
10	5	36	18	62	7	88	36	114	5	140	0
11	0	37	11	63	26	89	9	115	92	141	81
12	2	38	9	64	24	90	9	116	14	142	61
13	11	39	8	65	11	91	64	117	81	143	80
14	1	40	14	66	7	92	10	118	9	144	58
15	8	41	11	67	38	93	45	119	52	145	73
16	6	42	3	68	16	94	29	120	50	146	43
17	5	43	18	69	23	95	24	121	33	147	42
18	1	44	20	70	15	96	14	122	11	148	20
19	8	45	11	71	10	97	35	123	46	149	45
20	10	46	5	72	32	98	35	124	56	150	65
21	5	47	20	73	21	99	6	125	23	151	4
22	3	48	18	74	11	100	24	126	9	152	18
23	10	49	9	75	22	101	65	127	72	153	127
24	8	50	5	76	32	102	11	128	38	154	9
25	3	51	28	77	1	103	38	129	53	155	108
26	7	52	14	78	13	104	44	130	1	156	30

PC42-13

Sequence ~~124.5~~ : K-level sieve. ← Name

A 5209

main reference → Popular Computing V.4, no. 10 (October, 1976) p. 14-15
Popular Computing V.4, no. 5 (May, 1976) p. 6-7
Popular Computing V.4, no. 11 (November, 1976) p. 18

Enter

Ref. PC1 4 ~~43-15~~ 76.

1	1				
2	3				
3	9				
4	25				
5	57				
6	145				
7	337				
8	793				
9	1921				
10	3849				
11	8835				
12	18889				
13	41473				
14	92305				
15	203211				
16	432699				
17	944313				
18	2027529				
19	4077769				
20	8745153				
21	18133305				
22	37898113				
23	80713737				
24	169730259				
25	358760457				
26	750591867				
27	1575313473				
28	3255787851				
29	6751959507				
30	14108682265				
31	29364255033				
32	61173205587				
33	126792880201				
34	261786645129				
35	542760030745				
36	1090481316033				
37	2254104779211				
38	4576926103825				
39	9375021033745				
40	19362713813451				
41	39746772236619				
42	81889654169481				
43	168348435476475				
44	346352979792385				
45	710707885619259				
46	1454261791467673				
47	2985844385599497				
48	6112722593126091				
49	12525096166152969				
50	25453257177612675				
51	52120032930644041				
52	106216796997067065				
53	217388980361779977				
54	443667202522163353				
55	905860955252113281				
56	1851430774702624849				
57	3778065321123848833				
58	7700902493000163393				
		59721045190927381881499710261123			
		8064434252147229723515492934230308242133559888901	100		
		3727097631334253455067996456969941417811642485116	500		
		1734818267880537671943571900003441962106674037047			
		407233			
		5313532548926165408921584229151796140386264683541	1000		
		4010630692427060681617155340580221063014675818895			
		160812966126421891355204037441755816463307268532			
		6457016253865930987542603153162451709294642721995			
		3290391722638945523574345904078467012319750764268			
		7546266981530584938038605859667128033923096441412			
		4937911825			
		5119095356622829848295226812411528502341478017175	1199		
		963953307891241574659785529231843938218888817594			
		58001184532073340170622212188875613312551219			

Some results
K-level Sieve