

Comments on the Larsen Paper

1  
 (R) scanned  
 R G Wilson V

M#s

	1624	$n!$	
✓	$R_n^2$ 1824	$2^n \cdot n!$	
✓	$R_n$ 1986	$(2n)!/n!$	
✓	$S_n$ 1185	$A_n = A_{n-1} + (n-1)A_{n-2} \dots, 119952692896$	
✓	$S_n''$ 1599	$A_n = 2(A_{n-1} + (n-1)A_{n-2})$	
✓	$T_n$ 1708		
✓	$E_n$ 1910 = A900		Extend.
✓	$D_n$ 2772	$A_n = 2A_{n-1} + (2n-4)A_{n-2}$	
	$C_n$ 4335		Extend
✓	$B_n$ 4160	$(2n+1)!/n! = (2n)!/2n!$	
✓	$A_n$ 4531		Extend



These are M-numbers (not A-numbers)

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$$C_n = [R_n^2 - R_n - S_n'']/4$$

$$= [2^n \cdot n! - R_n - S_n'']/4$$

$$E_n = [S_n - S_n'']/2$$

$$m 2772 / 2 = m 1599$$

$$m 1986 / 2 = m 4160$$

$$m 1910 = (m 1185 - m 1599) / 2 \text{ almost.}$$

$$- \left[ \frac{n}{2} \right] \text{ in } m 1599) / 2$$

$$C_n = (R^2 - R_n - S_n) / 4$$

$n$	$R_n$	$(R^2)_n$	$S_n$	$S'_n$	$T_n$
14		64 51 20	2 39 04 80	65 12	1 08 97 96 46 60
15		64 51 20	10 34 95 36	65 12	16 34 61 96 40 24
16	16 80	10 32 19 20 <del>34 00</del>	46 20 67 36	3 24 00	2 61 53 61 57 83 44
17	16 80	10 32 19 20 <del>34 00</del>	2 11 79 93 12	3 24 00	44 46 09 82 75 24 88
18		185 79 45 60	9 97 31 38 24	16 89 92	8 00 29 69 85 76 87 76
19		185 79 45 60	48 09 70 14 40	16 89 92	
20	302 40	37 15 89 12 00 <del>30 60 16</del>	2 37 58 66 40 96	92 11 84	
21	302 40	37 15 89 12 00 <del>30 60 16</del>	11 99 52 69 28 96	92 11 84	
			61 88 84 63 89 12	5 22 22 08	

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$n$	$E_n$	$D_n$	$B_n$	$A_n$	$C_n$
14	1 19 19 84	32 56		1 08 96 60 97 68	15 96 52
15	5 17 15 12	32 56		16 34 56 62 96 04	15 96 52
16	23 08 71 68	1 62 00	8 40	2 61 53 35 90 21 76	2 57 19 60
17	1 05 88 34 56	1 62 00	8 40	44 46 08 74 28 00 32	2 57 19 60
18	49 85 72 41 6	8 44 96		8 00 29 64 40 70 54 72	46 40 63 92
19	24 04 76 62 24	8 44 96			46 40 63 92
20	118 78 87 14 56	46 05 92	1 51 20		9 28 73 49 44
21	5 99 75 88 58 56	46 05 92	1 51 20		9 28 73 49 44
22	3094 39 70 83 52	2 61 11 04			

✓  
A0900

A0901

4

a Table to evaluate and extend  $C_n$

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$$\frac{(R_n^2 - R_n - S_n'')}{4} = C_n$$

M4335

A0901

$n/2$	$R_n^2$ M1824	$R_n$ M1986	$S_n''$ M1599	$C_n$ M4335
0	2			
1	2		2	0
2	8	2	6	0
3	48		20	7
4	384	12	76	74
5	3840		312	882
6	46080	120	1384	11144
7	645120		6512	159652
8	321920	1680	32400	2571960
9	185794560		168992	46406392
10	3715891200	30240	921184	928734944
11	81749606400		5222208	20436096048
12	1961990553600	665280	30710464	409489794464
13	51011754393600		186753920	12752891909920
14	1428329123020800	17297280	1171979904 <del>+86753920</del>	357081983435904
15	42849873690624000		7573069568	10712466529388608
16	1371195958099968000	518918400	50305536256 <del>+171979904</del>	342798976818878336
17	46620662575398912000		342949298688 <del>7673069568</del>	11655165558112403328