

Scan

~~A3477~~

(delicate)

A3471

+ many

John Riordan

~~Q~~ 2 letters + 2
~~WJH~~ 1974 pages

5 pages

add to many sequences
many

(8) for

WAS

Neil Sloane, Esq.

Beil Laboratories

Murri Hill, New Jersey 07974

Dear Neil:

Thanks for sending the Lucas pages so promptly. In trying to make sense of them, I ran into the following, for the Handbook

1. The number of permutations of n in which no two consecutive numbers are adjacent is $A_n(0)$ of Lucas and does not appear in the Handbook

3168
459
3471

n	3	4	5	6	7	8	
$A_n(0)$	0	4	16	80	672	4752	48768
$A_n(0)$		1	4	20	168	1188	

$A_9(0)$ is given incorrectly in ICK as 528

2. Some time ago, working over Cayley on partitions, I ran into the sum $\binom{n+1}{n} = \sum a_n k \binom{n}{n-k}$, which entails $a_n(x) = 2a_{n-1}(x) + x a_{n-2}(x)$, $a_0(x) = 1$, $a_1(x) = 1 + 2x$, $a_n(1)$ is sequence A1333, $a_{n0} = 2^n$

and $a_n = (n+1)2^{n-2}$ is sequence 1160. Should it be noted that 1160 is $(n+1)2^{n-2}$? A1792

N1329 The same problem with $a_0(x) = 1$, $a_1(x) = 2$, has $a_n(1)$ as sequence 532, $a_n = (n-1)2^{n-2}$ as 1318, $a_{n2} = \binom{n-2}{2} 2^{n-4}$ as 1729, $\binom{n-3}{3} 2^{n-6} = a_n$ as 1163, $a_{n3} = \binom{n-4}{4} 2^{n-8}$ as 1164, $a_{n4} = \binom{n-5}{5} 2^{n-10}$ as 1165, $a_{n5} = \binom{n-6}{6} 2^{n-12}$ as 1166, $a_{n6} = \binom{n-7}{7} 2^{n-14}$ as 1167, $a_{n7} = \binom{n-8}{8} 2^{n-16}$ as 1168, $a_{n8} = \binom{n-9}{9} 2^{n-18}$ as 1169, $a_{n9} = \binom{n-10}{10} 2^{n-20}$ as 1170, $a_{n10} = \binom{n-11}{11} 2^{n-22}$ as 1171, $a_{n11} = \binom{n-12}{12} 2^{n-24}$ as 1172, $a_{n12} = \binom{n-13}{13} 2^{n-26}$ as 1173, $a_{n13} = \binom{n-14}{14} 2^{n-28}$ as 1174, $a_{n14} = \binom{n-15}{15} 2^{n-30}$ as 1175, $a_{n15} = \binom{n-16}{16} 2^{n-32}$ as 1176, $a_{n16} = \binom{n-17}{17} 2^{n-34}$ as 1177, $a_{n17} = \binom{n-18}{18} 2^{n-36}$ as 1178, $a_{n18} = \binom{n-19}{19} 2^{n-38}$ as 1179, $a_{n19} = \binom{n-20}{20} 2^{n-40}$ as 1180, $a_{n20} = \binom{n-21}{21} 2^{n-42}$ as 1181, $a_{n21} = \binom{n-22}{22} 2^{n-44}$ as 1182, $a_{n22} = \binom{n-23}{23} 2^{n-46}$ as 1183, $a_{n23} = \binom{n-24}{24} 2^{n-48}$ as 1184, $a_{n24} = \binom{n-25}{25} 2^{n-50}$ as 1185, $a_{n25} = \binom{n-26}{26} 2^{n-52}$ as 1186, $a_{n26} = \binom{n-27}{27} 2^{n-54}$ as 1187, $a_{n27} = \binom{n-28}{28} 2^{n-56}$ as 1188, $a_{n28} = \binom{n-29}{29} 2^{n-58}$ as 1189, $a_{n29} = \binom{n-30}{30} 2^{n-60}$ as 1190, $a_{n30} = \binom{n-31}{31} 2^{n-62}$ as 1191, $a_{n31} = \binom{n-32}{32} 2^{n-64}$ as 1192, $a_{n32} = \binom{n-33}{33} 2^{n-66}$ as 1193, $a_{n33} = \binom{n-34}{34} 2^{n-68}$ as 1194, $a_{n34} = \binom{n-35}{35} 2^{n-70}$ as 1195, $a_{n35} = \binom{n-36}{36} 2^{n-72}$ as 1196, $a_{n36} = \binom{n-37}{37} 2^{n-74}$ as 1197, $a_{n37} = \binom{n-38}{38} 2^{n-76}$ as 1198, $a_{n38} = \binom{n-39}{39} 2^{n-78}$ as 1199, $a_{n39} = \binom{n-40}{40} 2^{n-80}$ as 1200, $a_{n40} = \binom{n-41}{41} 2^{n-82}$ as 1201, $a_{n41} = \binom{n-42}{42} 2^{n-84}$ as 1202, $a_{n42} = \binom{n-43}{43} 2^{n-86}$ as 1203, $a_{n43} = \binom{n-44}{44} 2^{n-88}$ as 1204, $a_{n44} = \binom{n-45}{45} 2^{n-90}$ as 1205, $a_{n45} = \binom{n-46}{46} 2^{n-92}$ as 1206, $a_{n46} = \binom{n-47}{47} 2^{n-94}$ as 1207, $a_{n47} = \binom{n-48}{48} 2^{n-96}$ as 1208, $a_{n48} = \binom{n-49}{49} 2^{n-98}$ as 1209, $a_{n49} = \binom{n-50}{50} 2^{n-100}$ as 1210, $a_{n50} = \binom{n-51}{51} 2^{n-102}$ as 1211, $a_{n51} = \binom{n-52}{52} 2^{n-104}$ as 1212, $a_{n52} = \binom{n-53}{53} 2^{n-106}$ as 1213, $a_{n53} = \binom{n-54}{54} 2^{n-108}$ as 1214, $a_{n54} = \binom{n-55}{55} 2^{n-110}$ as 1215, $a_{n55} = \binom{n-56}{56} 2^{n-112}$ as 1216, $a_{n56} = \binom{n-57}{57} 2^{n-114}$ as 1217, $a_{n57} = \binom{n-58}{58} 2^{n-116}$ as 1218, $a_{n58} = \binom{n-59}{59} 2^{n-118}$ as 1219, $a_{n59} = \binom{n-60}{60} 2^{n-120}$ as 1220, $a_{n60} = \binom{n-61}{61} 2^{n-122}$ as 1221, $a_{n61} = \binom{n-62}{62} 2^{n-124}$ as 1222, $a_{n62} = \binom{n-63}{63} 2^{n-126}$ as 1223, $a_{n63} = \binom{n-64}{64} 2^{n-128}$ as 1224, $a_{n64} = \binom{n-65}{65} 2^{n-130}$ as 1225, $a_{n65} = \binom{n-66}{66} 2^{n-132}$ as 1226, $a_{n66} = \binom{n-67}{67} 2^{n-134}$ as 1227, $a_{n67} = \binom{n-68}{68} 2^{n-136}$ as 1228, $a_{n68} = \binom{n-69}{69} 2^{n-138}$ as 1229, $a_{n69} = \binom{n-70}{70} 2^{n-140}$ as 1230, $a_{n70} = \binom{n-71}{71} 2^{n-142}$ as 1231, $a_{n71} = \binom{n-72}{72} 2^{n-144}$ as 1232, $a_{n72} = \binom{n-73}{73} 2^{n-146}$ as 1233, $a_{n73} = \binom{n-74}{74} 2^{n-148}$ as 1234, $a_{n74} = \binom{n-75}{75} 2^{n-150}$ as 1235, $a_{n75} = \binom{n-76}{76} 2^{n-152}$ as 1236, $a_{n76} = \binom{n-77}{77} 2^{n-154}$ as 1237, $a_{n77} = \binom{n-78}{78} 2^{n-156}$ as 1238, $a_{n78} = \binom{n-79}{79} 2^{n-158}$ as 1239, $a_{n79} = \binom{n-80}{80} 2^{n-160}$ as 1240, $a_{n80} = \binom{n-81}{81} 2^{n-162}$ as 1241, $a_{n81} = \binom{n-82}{82} 2^{n-164}$ as 1242, $a_{n82} = \binom{n-83}{83} 2^{n-166}$ as 1243, $a_{n83} = \binom{n-84}{84} 2^{n-168}$ as 1244, $a_{n84} = \binom{n-85}{85} 2^{n-170}$ as 1245, $a_{n85} = \binom{n-86}{86} 2^{n-172}$ as 1246, $a_{n86} = \binom{n-87}{87} 2^{n-174}$ as 1247, $a_{n87} = \binom{n-88}{88} 2^{n-176}$ as 1248, $a_{n88} = \binom{n-89}{89} 2^{n-178}$ as 1249, $a_{n89} = \binom{n-90}{90} 2^{n-180}$ as 1250, $a_{n90} = \binom{n-91}{91} 2^{n-182}$ as 1251, $a_{n91} = \binom{n-92}{92} 2^{n-184}$ as 1252, $a_{n92} = \binom{n-93}{93} 2^{n-186}$ as 1253, $a_{n93} = \binom{n-94}{94} 2^{n-188}$ as 1254, $a_{n94} = \binom{n-95}{95} 2^{n-190}$ as 1255, $a_{n95} = \binom{n-96}{96} 2^{n-192}$ as 1256, $a_{n96} = \binom{n-97}{97} 2^{n-194}$ as 1257, $a_{n97} = \binom{n-98}{98} 2^{n-196}$ as 1258, $a_{n98} = \binom{n-99}{99} 2^{n-198}$ as 1259, $a_{n99} = \binom{n-100}{100} 2^{n-200}$ as 1260, $a_{n100} = \binom{n-101}{101} 2^{n-202}$ as 1261, $a_{n101} = \binom{n-102}{102} 2^{n-204}$ as 1262, $a_{n102} = \binom{n-103}{103} 2^{n-206}$ as 1263, $a_{n103} = \binom{n-104}{104} 2^{n-208}$ as 1264, $a_{n104} = \binom{n-105}{105} 2^{n-210}$ as 1265, $a_{n105} = \binom{n-106}{106} 2^{n-212}$ as 1266, $a_{n106} = \binom{n-107}{107} 2^{n-214}$ as 1267, $a_{n107} = \binom{n-108}{108} 2^{n-216}$ as 1268, $a_{n108} = \binom{n-109}{109} 2^{n-218}$ as 1269, $a_{n109} = \binom{n-110}{110} 2^{n-220}$ as 1270, $a_{n110} = \binom{n-111}{111} 2^{n-222}$ as 1271, $a_{n111} = \binom{n-112}{112} 2^{n-224}$ as 1272, $a_{n112} = \binom{n-113}{113} 2^{n-226}$ as 1273, $a_{n113} = \binom{n-114}{114} 2^{n-228}$ as 1274, $a_{n114} = \binom{n-115}{115} 2^{n-230}$ as 1275, $a_{n115} = \binom{n-116}{116} 2^{n-232}$ as 1276, $a_{n116} = \binom{n-117}{117} 2^{n-234}$ as 1277, $a_{n117} = \binom{n-118}{118} 2^{n-236}$ as 1278, $a_{n118} = \binom{n-119}{119} 2^{n-238}$ as 1279, $a_{n119} = \binom{n-120}{120} 2^{n-240}$ as 1280, $a_{n120} = \binom{n-121}{121} 2^{n-242}$ as 1281, $a_{n121} = \binom{n-122}{122} 2^{n-244}$ as 1282, $a_{n122} = \binom{n-123}{123} 2^{n-246}$ as 1283, $a_{n123} = \binom{n-124}{124} 2^{n-248}$ as 1284, $a_{n124} = \binom{n-125}{125} 2^{n-250}$ as 1285, $a_{n125} = \binom{n-126}{126} 2^{n-252}$ as 1286, $a_{n126} = \binom{n-127}{127} 2^{n-254}$ as 1287, $a_{n127} = \binom{n-128}{128} 2^{n-256}$ as 1288, $a_{n128} = \binom{n-129}{129} 2^{n-258}$ as 1289, $a_{n129} = \binom{n-130}{130} 2^{n-260}$ as 1290, $a_{n130} = \binom{n-131}{131} 2^{n-262}$ as 1291, $a_{n131} = \binom{n-132}{132} 2^{n-264}$ as 1292, $a_{n132} = \binom{n-133}{133} 2^{n-266}$ as 1293, $a_{n133} = \binom{n-134}{134} 2^{n-268}$ as 1294, $a_{n134} = \binom{n-135}{135} 2^{n-270}$ as 1295, $a_{n135} = \binom{n-136}{136} 2^{n-272}$ as 1296, $a_{n136} = \binom{n-137}{137} 2^{n-274}$ as 1297, $a_{n137} = \binom{n-138}{138} 2^{n-276}$ as 1298, $a_{n138} = \binom{n-139}{139} 2^{n-278}$ as 1299, $a_{n139} = \binom{n-140}{140} 2^{n-280}$ as 1300, $a_{n140} = \binom{n-141}{141} 2^{n-282}$ as 1301, $a_{n141} = \binom{n-142}{142} 2^{n-284}$ as 1302, $a_{n142} = \binom{n-143}{143} 2^{n-286}$ as 1303, $a_{n143} = \binom{n-144}{144} 2^{n-288}$ as 1304, $a_{n144} = \binom{n-145}{145} 2^{n-290}$ as 1305, $a_{n145} = \binom{n-146}{146} 2^{n-292}$ as 1306, $a_{n146} = \binom{n-147}{147} 2^{n-294}$ as 1307, $a_{n147} = \binom{n-148}{148} 2^{n-296}$ as 1308, $a_{n148} = \binom{n-149}{149} 2^{n-298}$ as 1309, $a_{n149} = \binom{n-150}{150} 2^{n-300}$ as 1310, $a_{n150} = \binom{n-151}{151} 2^{n-302}$ as 1311, $a_{n151} = \binom{n-152}{152} 2^{n-304}$ as 1312, $a_{n152} = \binom{n-153}{153} 2^{n-306}$ as 1313, $a_{n153} = \binom{n-154}{154} 2^{n-308}$ as 1314, $a_{n154} = \binom{n-155}{155} 2^{n-310}$ as 1315, $a_{n155} = \binom{n-156}{156} 2^{n-312}$ as 1316, $a_{n156} = \binom{n-157}{157} 2^{n-314}$ as 1317, $a_{n157} = \binom{n-158}{158} 2^{n-316}$ as 1318, $a_{n158} = \binom{n-159}{159} 2^{n-318}$ as 1319, $a_{n159} = \binom{n-160}{160} 2^{n-320}$ as 1320, $a_{n160} = \binom{n-161}{161} 2^{n-322}$ as 1321, $a_{n161} = \binom{n-162}{162} 2^{n-324}$ as 1322, $a_{n162} = \binom{n-163}{163} 2^{n-326}$ as 1323, $a_{n163} = \binom{n-164}{164} 2^{n-328}$ as 1324, $a_{n164} = \binom{n-165}{165} 2^{n-330}$ as 1325, $a_{n165} = \binom{n-166}{166} 2^{n-332}$ as 1326, $a_{n166} = \binom{n-167}{167} 2^{n-334}$ as 1327, $a_{n167} = \binom{n-168}{168} 2^{n-336}$ as 1328, $a_{n168} = \binom{n-169}{169} 2^{n-338}$ as 1329, $a_{n169} = \binom{n-170}{170} 2^{n-340}$ as 1330, $a_{n170} = \binom{n-171}{171} 2^{n-342}$ as 1331, $a_{n171} = \binom{n-172}{172} 2^{n-344}$ as 1332, $a_{n172} = \binom{n-173}{173} 2^{n-346}$ as 1333, $a_{n173} = \binom{n-174}{174} 2^{n-348}$ as 1334, $a_{n174} = \binom{n-175}{175} 2^{n-350}$ as 1335, $a_{n175} = \binom{n-176}{176} 2^{n-352}$ as 1336, $a_{n176} = \binom{n-177}{177} 2^{n-354}$ as 1337, $a_{n177} = \binom{n-178}{178} 2^{n-356}$ as 1338, $a_{n178} = \binom{n-179}{179} 2^{n-358}$ as 1339, $a_{n179} = \binom{n-180}{180} 2^{n-360}$ as 1340, $a_{n180} = \binom{n-181}{181} 2^{n-362}$ as 1341, $a_{n181} = \binom{n-182}{182} 2^{n-364}$ as 1342, $a_{n182} = \binom{n-183}{183} 2^{n-366}$ as 1343, $a_{n183} = \binom{n-184}{184} 2^{n-368}$ as 1344, $a_{n184} = \binom{n-185}{185} 2^{n-370}$ as 1345, $a_{n185} = \binom{n-186}{186} 2^{n-372}$ as 1346, $a_{n186} = \binom{n-187}{187} 2^{n-374}$ as 1347, $a_{n187} = \binom{n-188}{188} 2^{n-376}$ as 1348, $a_{n188} = \binom{n-189}{189} 2^{n-378}$ as 1349, $a_{n189} = \binom{n-190}{190} 2^{n-380}$ as 1350, $a_{n190} = \binom{n-191}{191} 2^{n-382}$ as 1351, $a_{n191} = \binom{n-192}{192} 2^{n-384}$ as 1352, $a_{n192} = \binom{n-193}{193} 2^{n-386}$ as 1353, $a_{n193} = \binom{n-194}{194} 2^{n-388}$ as 1354, $a_{n194} = \binom{n-195}{195} 2^{n-390}$ as 1355, $a_{n195} = \binom{n-196}{196} 2^{n-392}$ as 1356, $a_{n196} = \binom{n-197}{197} 2^{n-394}$ as 1357, $a_{n197} = \binom{n-198}{198} 2^{n-396}$ as 1358, $a_{n198} = \binom{n-199}{199} 2^{n-398}$ as 1359, $a_{n199} = \binom{n-200}{200} 2^{n-400}$ as 1360, $a_{n200} = \binom{n-201}{201} 2^{n-402}$ as 1361, $a_{n201} = \binom{n-202}{202} 2^{n-404}$ as 1362, $a_{n202} = \binom{n-203}{203} 2^{n-406}$ as 1363, $a_{n203} = \binom{n-204}{204} 2^{n-408}$ as 1364, $a_{n204} = \binom{n-205}{205} 2^{n-410}$ as 1365, $a_{n205} = \binom{n-206}{206} 2^{n-412}$ as 1366, $a_{n206} = \binom{n-207}{207} 2^{n-414}$ as 1367, $a_{n207} = \binom{n-208}{208} 2^{n-416}$ as 1368, $a_{n208} = \binom{n-209}{209} 2^{n-418}$ as 1369, $a_{n209} = \binom{n-210}{210} 2^{n-420}$ as 1370, $a_{n210} = \binom{n-211}{211} 2^{n-422}$ as 1371, $a_{n211} = \binom{n-212}{212} 2^{n-424}$ as 1372, $a_{n212} = \binom{n-213}{213} 2^{n-426}$ as 1373, $a_{n213} = \binom{n-214}{214} 2^{n-428}$ as 1374, $a_{n214} = \binom{n-215}{215} 2^{n-430}$ as 1375, $a_{n215} = \binom{n-216}{216} 2^{n-432}$ as 1376, $a_{n216} = \binom{n-217}{217} 2^{n-434}$ as 1377, $a_{n217} = \binom{n-218}{218} 2^{n-436}$ as 1378, $a_{n218} = \binom{n-219}{219} 2^{n-438}$ as 1379, $a_{n219} = \binom{n-220}{220} 2^{n-440}$ as 1380, $a_{n220} = \binom{n-221}{221} 2^{n-442}$ as 1381, $a_{n221} = \binom{n-222}{222} 2^{n-444}$ as 1382, $a_{n222} = \binom{n-223}{223} 2^{n-446}$ as 1383, $a_{n223} = \binom{n-224}{224} 2^{n-448}$ as 1384, $a_{n224} = \binom{n-225}{225} 2^{n-450}$ as 1385, $a_{n225} = \binom{n-226}{226} 2^{n-452}$ as 1386, $a_{n226} = \binom{n-227}{227} 2^{n-454}$ as 1387, $a_{n227} = \binom{n-228}{228} 2^{n-456}$ as 1388, $a_{n228} = \binom{n-229}{229} 2^{n-458}$ as 1389, $a_{n229} = \binom{n-230}{230} 2^{n-460}$ as 1390, $a_{n230} = \binom{n-231}{231} 2^{n-462}$ as 1391, $a_{n231} = \binom{n-232}{232} 2^{n-464}$ as 1392, $a_{n232} = \binom{n-233}{233} 2^{n-466}$ as 1393, $a_{n233} = \binom{n-234}{234} 2^{n-468}$ as 1394, $a_{n234} = \binom{n-235}{235} 2^{n-470}$ as 1395, $a_{n235} = \binom{n-236}{236} 2^{n-472}$ as 1396, $a_{n236} = \binom{n-237}{237} 2^{n-474}$ as 1397, $a_{n237} = \binom{n-238}{238} 2^{n-476}$ as 1398, $a_{n238} = \binom{n-239}{239} 2^{n-478}$ as 1399, $a_{n239} = \binom{n-240}{240} 2^{n-480}$ as 1400, $a_{n240} = \binom{n-241}{241} 2^{n-482}$ as 1401, $a_{n241} = \binom{n-242}{242} 2^{n-484}$ as 1402, $a_{n242} = \binom{n-243}{243} 2^{n-486}$ as 1403, $a_{n243} = \binom{n-244}{244} 2^{n-488}$ as 1404, $a_{n244} = \binom{n-245}{245} 2^{n-490}$ as 1405, $a_{n245} = \binom{n-246}{246} 2^{n-492}$ as 1406, $a_{n246} = \binom{n-247}{247} 2^{n-494}$ as 1407, $a_{n247} = \binom{n-248}{248} 2^{n-496}$ as 1408, $a_{n248} = \binom{n-249}{249} 2^{n-498}$ as 1409, $a_{n249} = \binom{n-250}{250} 2^{n-500}$ as 1410, $a_{n250} = \binom{n-251}{251} 2^{n-502}$ as 1411, $a_{n251} = \binom{n-252}{252} 2^{n-504}$ as 1412, $a_{n252} = \binom{n-253}{253} 2^{n-506}$ as 1413, $a_{n253} = \binom{n-254}{254} 2^{n-508}$ as 1414, $a_{n254} = \binom{n-255}{255} 2^{n-510}$ as 1415, $a_{n255} = \binom{n-256}{256} 2^{n-512}$ as 1416, $a_{n256} = \binom{n-257}{257} 2^{n-514}$ as 1417, $a_{n257} = \binom{n-258}{258} 2^{n-516}$ as 1418, $a_{n258} = \binom{n-259}{259} 2^{n-518}$ as 1419, $a_{n259} = \binom{n-260}{260} 2^{n-520}$ as 1420, $a_{n260} = \binom{n-261}{261} 2^{n-522}$ as 1421, $a_{n261} = \binom{n-262}{262} 2^{n-524}$ as 1422, $a_{n262} = \binom{n-263}{263} 2^{n-526}$ as 1423, $a_{n263} = \binom{n-264}{264} 2^{n-528}$ as 1424, $a_{n264} = \binom{n-265}{265} 2^{n-530}$ as 1425, $a_{n265} = \binom{n-266}{266} 2^{n-532}$ as 1426, $a_{n266} = \binom{n-267}{267} 2^{n-534}$ as 1427, $a_{n267} = \binom{n-268}{268} 2^{n-536}$ as 1428, $a_{n268} = \binom{n-269}{269} 2^{n-538}$ as 1429, $a_{n269} = \binom{n-270}{270} 2^{n-540}$ as 1430, $a_{n270} = \binom{n-271}{271} 2^{n-542}$ as 1431, $a_{n271} = \binom{n-272}{272} 2^{n-544}$ as 1432, $a_{n272} = \binom{n-273}{273} 2^{n-546}$ as 1433, $a_{n273} = \binom{n-274}{274} 2^{n-548}$ as 1434, $a_{n274} = \binom{n-275}{275} 2^{n-550}$ as 1435, $a_{n275} = \binom{n-276}{276} 2^{n-552}$ as 1436, $a_{n276} = \binom{n-277}{277} 2^{n-554}$ as 1437, $a_{n277} = \binom{n-278}{278} 2^{n-556}$ as 1438, $a_{n278} = \binom{n-279}{279} 2^{n-558}$ as 1439, $a_{n279} = \binom{n-280}{280} 2^{n-560}$ as 1440, $a_{n280} = \binom{n-281}{281} 2^{n-562}$ as 1441, $a_{n281} = \binom{n-282}{282} 2^{n-564}$ as 1442, $a_{n282} = \binom{n-283}{283} 2^{n-566}$ as 1443, $a_{n283} = \binom{n-284}{284} 2^{n-568}$ as 1444, $a_{n284} = \binom{n-285}{285} 2^{n-570}$ as 1445, $a_{n285} = \binom{n-286}{286} 2^{n-572}$ as 1446, $a_{n286} = \binom{n-287}{287} 2^{n-574}$ as 1447, $a_{n287} = \binom{n-288}{288$

100-104-10-12/1774

1/5/20

Per. 5/June Esq.

Bell Labs

B. Laboratories

Myra, New Jersey 07974

Dear Neighbor,

He. There are some more sequences (promised in my letter

01/24/77

N 297

1. Random Tournaments sequence 297. I ran into the paper by Capell & Narayana which you reference and found they had neglected the simple recurrences implicit in their definitions.

If T_n is the number, their definitions may be compressed to

A2083

100% water in C. d. n. from 1927

$$d_n = d_{n-1} + d_{n-2}$$

A347v

④

18.5.14

 $34.0 =$

N 1109.5

for special

$$a_n(x) = \frac{1}{n!} f^{(n)}(x) = \frac{1}{n!} \left(\frac{1}{x} \right)^{(n)} = \frac{1}{n!} \left((-1)^n n! x^{-(n+1)} \right) = (-1)^n x^{-(n+1)} = \frac{(-1)^n}{x^{n+1}}$$

i 2 3 4 5 147 8 824 45741 405845 A3470
i 3 8 3 53 53 15 162 - au

-A259859

A3470

f91

N297 2083

f91

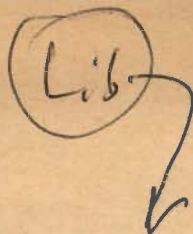
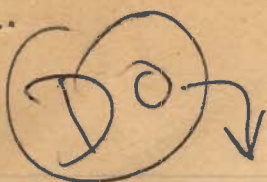
cut

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from London's letter but not used



2.

3. A paper by SM Tanny and M Zisker, *On the*...

... *Discrete* ... 1979, 7981 (M.T.A. 5)

... *Discrete* ...

3	4	5	6	7	8	9
143	986	6764	46367	317816	2178368	19930351

36	212	186	125.58	8.840
----	-----	-----	--------	-------

Ent
Ent

... *Discrete* ...

... *Discrete* ...

... *Discrete* ...

... *Discrete* ...

$$r_{k+2} = 7r_{k+1} - r_k + 4, k=1,2,\dots$$

⑧ + Enclose two tables which might have been included in

... *Discrete* ...

A1818

1997

3.

Your question 1997, for which the reference in Central Factorial

... *Discrete* ...

... *Discrete* ...

... *Discrete* ...

7.

... *Discrete* ...

Your

John

Rate and
 $L(x) = Y_n(x, 2)$
 $L(x) =$

Table of
(mx)

$$\sum (x_i) x_i^k x_i^k$$

Rate and

L₁₀ 1 1 3 10

L₁₁ 2 1 2 3

1 2 3

1 6

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

1 1

196

5

3

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

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29

30

31

32

33

Base 1148

Base 11729

Base 11730

Base 11862

Base 11862

[Redacted]

Altitude	Time	Distance	Speed	Direction	Remarks
1	1	7	38	291	2932
2	2	3	4	5	6
3	3	16	125	1296	13
4	4	15	110	1090	13
5	5	6	45	435	5
6	6	10	105	1	1
7	7	1	15	21	378
8	8	1	28	7056	430
9	9	1	36	9936	120
10	10	1	120	120	120
11	11	1	120	120	120
12	12	1	120	120	120
13	13	1	120	120	120
14	14	1	120	120	120
15	15	1	120	120	120
16	16	1	120	120	120
17	17	1	120	120	120
18	18	1	120	120	120
19	19	1	120	120	120
20	20	1	120	120	120
21	21	1	120	120	120
22	22	1	120	120	120
23	23	1	120	120	120
24	24	1	120	120	120
25	25	1	120	120	120
26	26	1	120	120	120