

	a(n)	Solution 1		Solution 2		Solution 3		Solution 4	
n	z	X ₁	Y ₁	X ₂	Y ₂	X ₃	Y ₃	X ₄	Y ₄
1	469625	455175	340	433500	425	349575	560	165308	663
2	1878500	1820700	680	1734000	850	1398300	1120	661232	1326
3	2224625	2224300	195	2156175	740	2053500	925	783068	1443
4	4226625	4096575	1020	3901500	1275	3146175	1680	1487772	1989
5	7514000	7282800	1360	6936000	1700	5593200	2240	2644928	2652
6	8898500	8897200	390	8624700	1480	8214000	1850	3132272	2886
7	11740625	11379375	1700	10837500	2125	8739375	2800	4132700	3315
8	15289625	14819175	1940	14113500	2425	5381948	3783	1558375	3900
9	16906500	16386300	2040	15606000	2550	12584700	3360	5951088	3978
10	20021625	20018700	585	19405575	2220	18481500	2775	7047612	4329
11	23011625	22303575	2380	21241500	2975	17129175	3920	8100092	4641
12	25716665	25712908	663	24925383	2516	23738460	3145	19142727	4144
13	30056000	29131200	2720	27744000	3400	22372800	4480	10579712	5304
14	35594000	35588800	780	34498800	2960	32856000	3700	12529088	5772
15	38039625	36869175	3060	35113500	3825	28315575	5040	13389948	5967
16	46962500	45517500	3400	43350000	4250	34957500	5600	16530800	6630
17	54316275	47683725	5100	45658893	5424	39682875	6090	31906875	6630
18	55615625	55607500	975	53904375	3700	51337500	4625	19576700	7215
19	56824625	55076175	3740	52453500	4675	42298575	6160	20002268	7293
20	61158500	59276700	3880	56454000	4850	21527792	7566	6233500	7800
21	67626000	65545200	4080	62424000	5100	50338800	6720	23804352	7956
22	79366625	76924575	4420	73261500	5525	59078175	7280	27937052	8619
23	80086500	80074800	1170	77622300	4440	73926000	5550	28190448	8658
24	92046500	89214300	4760	84966000	5950	68516700	7840	32400368	9282
25	92481870	92319630	2340	72849522	7548	55977870	8580	43020978	9048
26	102866660	102851632	1326	99701532	5032	94953840	6290	76570908	8288
27	105665625	102414375	5100	97537500	6375	78654375	8400	37194300	9945
28	109006625	108990700	1365	105652575	5180	100621500	6475	38370332	10101
29	120224000	116524800	5440	110976000	6800	89491200	8960	42318848	10608
30	135721625	131545575	5780	125281500	7225	101027175	9520	47774012	11271
31	137606625	133372575	5820	127021500	7275	48437532	11349	14025375	11700

	a(n)	Solution 1		Solution 2		Solution 3		Solution 4	
n	z	X ₁	Y ₁	X ₂	Y ₂	X ₃	Y ₃	X ₄	Y ₄
32	142376000	142355200	1560	137995200	5920	131424000	7400	50116352	11544
33	152158500	147476700	6120	140454000	7650	113262300	10080	53559792	11934
34	169534625	164318175	6460	156493500	8075	126196575	10640	59676188	12597
35	176748065	171309663	6596	163152060	8245	131566047	10864	18014815	13260
36	180194625	180168300	1755	174650175	6660	166333500	8325	63428508	12987
37	187850000	182070000	6800	173400000	8500	139830000	11200	66123200	13260
38	207104625	200732175	7140	191173500	8925	154162575	11760	72900828	13923
39	217265100	190734900	10200	182635572	10848	158731500	12180	127627500	13260
40	222462500	222430000	1950	215617500	7400	205350000	9250	78306800	14430
41	227298500	220304700	7480	209814000	9350	169194300	12320	80009072	14586
42	231449985	231416172	1989	224328447	7548	213646140	9435	172284543	12432
43	244634000	237106800	7760	225816000	9700	86111168	15132	24934000	15600
44	246939205	246938045	870	246920387	1746	212012997	11252	187641795	12670
45	248431625	240787575	7820	229321500	9775	184925175	12880	87447932	15249
46	249125225	248829000	3485	248639127	3944	243049000	7395	221567337	10672
47	269179625	269140300	2145	260897175	8140	248473500	10175	94751228	15873
48	270504000	262180800	8160	249696000	10200	201355200	13440	95217408	15912
49	291143905	288387513	6322	282900423	8294	210828345	14170	34134113	17004
50	293515625	284484375	8500	270937500	10625	218484375	14000	103317500	16575
51	317466500	307698300	8840	293046000	11050	236312700	14560	111748208	17238
52	320346000	320299200	2340	310489200	8880	295704000	11100	112761792	17316
53	342018750	341418750	4500	267095742	14616	207018750	16500	159101250	17400
54	342356625	331822575	9180	316021500	11475	254840175	15120	120509532	17901
55	368186000	356857200	9520	339864000	11900	274066800	15680	129601472	18564
56	369927480	369278520	4680	291398088	15096	223911480	17160	172083912	18096
57	375961625	375906700	2535	364393575	9620	347041500	12025	132338492	18759
58	382240625	370479375	9700	352837500	12125	134548700	18915	38959375	19500
59	394954625	382802175	9860	364573500	12325	293992575	16240	139024028	19227
60	411466640	411406528	2652	398806128	10064	379815360	12580	306283632	16576
61	422662500	409657500	10200	390150000	12750	314617500	16800	148777200	19890
62	436026500	435962800	2730	422610300	10360	402486000	12950	153481328	20202

	a(n)	Solution 1		Solution 2		Solution 3		Solution 4	
n	z	X ₁	Y ₁	X ₂	Y ₂	X ₃	Y ₃	X ₄	Y ₄
63	451309625	437423175	10540	416593500	13175	335941575	17360	158860988	20553
64	480896000	466099200	10880	443904000	13600	357964800	17920	169275392	21216
65	488846475	429153525	15300	410930037	16272	357145875	18270	287161875	19890
66	500540625	500467500	2925	485139375	11100	462037500	13875	176190300	21645
67	511421625	495685575	11220	472081500	14025	380687175	18480	180020412	21879
68	542886500	526182300	11560	501126000	14450	404108700	19040	191096048	22542
69	550426500	533490300	11640	508086000	14550	193750128	22698	56101500	23400
70	569504000	569420800	3120	551980800	11840	525696000	14800	200465408	23088
71	575290625	557589375	11900	531037500	14875	428229375	19600	202502300	23205
72	608634000	589906800	12240	561816000	15300	453049200	20160	214239168	23868
73	678138500	657272700	12920	625974000	16150	504786300	21280	238704752	25194
74	706992260	685238652	13192	652608240	16490	526264188	21728	72059260	26520
75	714299625	692321175	13260	659353500	16575	531703575	21840	251433468	25857
76	720778500	720673200	3510	698600700	13320	665334000	16650	253714032	25974
77	749191625	726139575	13580	691561500	16975	263715452	26481	76360375	27300
78	751400000	728280000	13600	693600000	17000	559320000	22400	264492800	26520
79	771421625	747685575	13780	712081500	17225	648490425	20440	271540412	26871
80	789439625	765149175	13940	728713500	17425	587635575	22960	277882748	27183
81	803089625	802972300	3705	778379175	14060	741313500	17575	282687548	27417
82	828418500	802928700	14280	764694000	17850	616650300	23520	291603312	27846
83	832336830	830876670	7020	655645698	22644	503800830	25740	387188802	27144
84	837259865	837137548	3783	811498023	14356	772855260	17945	85336615	28860
85	838683625	830743425	10730	810648553	14664	607322625	24050	98328425	28860
86	868336625	841618575	14620	801541500	18275	646364175	24080	305654492	28509
87	869060400	762939600	20400	730542288	21696	634926000	24360	510510000	26520
88	889850000	889720000	3900	862470000	14800	821400000	18500	313227200	28860
89	909194000	881218800	14960	839256000	18700	676777200	24640	320036288	29172
90	925799940	925664688	3978	897313788	15096	854584560	18870	689138172	24864
91	950990625	921729375	15300	877837500	19125	707889375	25200	334748700	29835
92	960961625	931393575	15380	887041500	19225	553708500	28025	338258492	29991
93	978536000	948427200	15520	903264000	19400	344444672	30264	99736000	31200

	a(n)	Solution 1		Solution 2		Solution 3		Solution 4	
n	z	x ₁	y ₁	x ₂	y ₂	x ₃	y ₃	x ₄	y ₄
94	981059625	980916300	4095	950873175	15540	905593500	19425	345332988	30303
95	987756820	987752180	1740	987681548	3492	848051988	22504	750567180	25340
96	993726500	963150300	15640	917286000	19550	739700700	25760	349791728	30498
97	996500900	995316000	6970	994556508	7888	972196000	14790	886269348	21344

- |
 ? "lightgray" --> $y \bmod 65 = 0$
 ? "green" --> $y \bmod 65 = 0$ and $y \bmod 145 = 0$
 ? "red" --> $y \bmod 145 = 0$

Terms can be classified in 6 different colored groups. The blue group is the biggest group with 6 chains. Please look at <https://oeis.org/A346110/a346110.gif> for corresponding colors too.

Every color stands for a ratio. e.g. :

This means: $z * 6844/6845 = x$

	has the ratio:	6844/6845
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If this is fulfilled, the x and y value is in the colored chain.
 (The ratio between z and y is not here calculated)

Following table gives colors and the ratio:

The blue group has 83 terms up to 10^9 with 6 chains:

	has the ratio:	6844/6845
	has the ratio:	63/65
	has the ratio:	12/13
	has the ratio:	13983/18785
	has the ratio:	44/125
	has the ratio:	959/9409
	has the ratio:	25939617/30856865
	has the ratio:	4429668/7687693

a(79) has a "black sheep"

a(92) has a "black sheep"

The green group has 4 terms up to 10^9 with 4 chains:

	has the ratio:	37399/42601
	has the ratio:	134687/160225
	has the ratio:	18245/24973
	has the ratio:	31595137/46305025

The red group has 4 terms up to 10^9 with 4 chains:

	has the ratio:	18209/18241
	has the ratio:	19303/24505
	has the ratio:	11041/18241
	has the ratio:	1463/3145
	has the ratio:	1535033/1965625

a(53) has a "black sheep"

The violet group has 2 terms up to 10^9 :

	has the ratio:	837/845
	has the ratio:	57723/59405
	has the ratio:	21/29
	has the ratio:	17/145
	has the ratio:	4796737/4962625

a(85) has a "black sheep"

The brown group has 2 terms up to 10^9 :

	has the ratio:	840/841
	has the ratio:	1023/1025
	has the ratio:	40/41
	has the ratio:	263457/296225

The yellow group has 2 terms up to 10^9 :

	has the ratio:	1703021/1703029
	has the ratio:	26243/26245
	has the ratio:	77/905
	has the ratio:	207339/272861

Terms with the same color combinations are congruent. Means: higher terms are a square multiple of z.