

a 23751
x Für alle natürliche Zahlen von 1 bis Wurzel aus a

Rechengang: $((a/2)+((x*x)/2))/x$ Kantenlänge größeres Quadrat
 $((a/2)-((x*x)/2))/x$ Kantenlänge kleineres Quadrat

Für alle Lösungen x gilt: Ganzzahlige Kantenlängen ergeben sich nur bei: (x IN Primfaktorenzerlegung) bzw. aus der Multiplikation von diesen Primzahlen
Daraus ergibt sich: Ganzzahlige Kantenlängen können nur bei "x = ungerade" existieren
Daraus ergibt sich ebenfalls: Wenn (a = grade) kann es keine ganzzahligen Kantenlängen als Ergebnis geben
Daraus ergibt sich ebenfalls: Wenn (a = Primzahl) gibt es natürlich nur ein Ergebnis

x	Kantenlängen		Flächen		Differenz
	groß	klein	groß	klein	
1	11876	11875	141039376	141015625	23751 OK
2	5938,75	5936,75	35268751,6	35245000,6	23751
3	3960	3957	15681600	15657849	23751 OK
4	2970,875	2966,875	8826098,27	8802347,27	23751
5	2377,6	2372,6	5652981,76	5629230,76	23751
6	1982,25	1976,25	3929315,06	3905564,06	23751
7	1700	1693	2890000	2866249	23751 OK
8	1488,4375	1480,4375	2215446,19	2191695,19	23751
9	1324	1315	1752976	1729225	23751 OK
10	1192,55	1182,55	1422175,5	1398424,5	23751
11	1085,09091	1074,09091	1177422,28	1153671,28	23751
12	995,625	983,625	991269,141	967518,141	23751
13	920	907	846400	822649	23751 OK
14	855,25	841,25	731452,563	707701,563	23751
15	799,2	784,2	638720,64	614969,64	23751
16	750,21875	734,21875	562828,173	539077,173	23751
17	707,058824	690,058824	499932,18	476181,18	23751
18	668,75	650,75	447226,563	423475,563	23751
19	634,526316	615,526316	402623,645	378872,645	23751
20	603,775	583,775	364544,251	340793,251	23751
21	576	555	331776	308025	23751 OK
22	550,795455	528,795455	303375,633	279624,633	23751
23	527,826087	504,826087	278600,378	254849,378	23751

24	506,8125	482,8125	256858,91	233107,91	23751
25	487,52	462,52	237675,75	213924,75	23751
26	469,75	443,75	220665,063	196914,063	23751
27	453,333333	426,333333	205511,111	181760,111	23751
28	438,125	410,125	191953,516	168202,516	23751
29	424	395	179776	156025	23751 OK
30	410,85	380,85	168797,723	145046,723	23751
31	398,580645	367,580645	158866,531	135115,531	23751
32	387,109375	355,109375	149853,668	126102,668	23751
33	376,363636	343,363636	141649,587	117898,587	23751
34	366,279412	332,279412	134160,607	110409,607	23751
35	356,8	321,8	127306,24	103555,24	23751
36	347,875	311,875	121017,016	97266,0156	23751
37	339,459459	302,459459	115232,725	91481,7246	23751
38	331,513158	293,513158	109900,974	86149,9739	23751
39	324	285	104976	81225	23751 OK
40	316,8875	276,8875	100417,688	76666,6877	23751
41	310,146341	269,146341	96190,7531	72439,7531	23751
42	303,75	261,75	92264,0625	68513,0625	23751
43	297,674419	254,674419	88610,0595	64859,0595	23751
44	291,897727	247,897727	85204,2832	61453,2832	23751
45	286,4	241,4	82024,96	58273,96	23751
46	281,163043	235,163043	79052,657	55301,657	23751
47	276,170213	229,170213	76269,9864	52518,9864	23751
48	271,40625	223,40625	73661,3525	49910,3525	23751
49	266,857143	217,857143	71212,7347	47461,7347	23751
50	262,51	212,51	68911,5001	45160,5001	23751
51	258,352941	207,352941	66746,2422	42995,2422	23751
52	254,375	202,375	64706,6406	40955,6406	23751
53	250,566038	197,566038	62783,3393	39032,3393	23751
54	246,916667	192,916667	60967,8403	37216,8403	23751
55	243,418182	188,418182	59252,4112	35501,4112	23751
56	240,0625	184,0625	57630,0039	33879,0039	23751
57	236,842105	179,842105	56094,1828	32343,1828	23751
58	233,75	175,75	54639,0625	30888,0625	23751
59	230,779661	171,779661	53259,2519	29508,2519	23751
60	227,925	167,925	51949,8056	28198,8056	23751

61	225,180328	164,180328	50706,1801	26955,1801	23751
62	222,540323	160,540323	49524,1952	25773,1952	23751
63	220	157	48400	24649	23751 OK
64	217,554688	153,554688	47330,0421	23579,0421	23751
65	215,2	150,2	46311,04	22560,04	23751
66	212,931818	146,931818	45339,9592	21588,9592	23751
67	210,746269	143,746269	44413,9898	20662,9898	23751
68	208,639706	140,639706	43530,5269	19779,5269	23751
69	206,608696	137,608696	42687,1531	18936,1531	23751
70	204,65	134,65	41881,6225	18130,6225	23751
71	202,760563	131,760563	41111,8461	17360,8461	23751
72	200,9375	128,9375	40375,8789	16624,8789	23751
73	199,178082	126,178082	39671,9084	15920,9084	23751
74	197,47973	123,47973	38998,2437	15247,2437	23751
75	195,84	120,84	38353,3056	14602,3056	23751
76	194,256579	118,256579	37735,6185	13984,6185	23751
77	192,727273	115,727273	37143,8017	13392,8017	23751
78	191,25	113,25	36576,5625	12825,5625	23751
79	189,822785	110,822785	36032,6896	12281,6896	23751
80	188,44375	108,44375	35511,0469	11760,0469	23751
81	187,111111	106,111111	35010,5679	11259,5679	23751
82	185,823171	103,823171	34530,2508	10779,2508	23751
83	184,578313	101,578313	34069,1537	10318,1537	23751
84	183,375	99,375	33626,3906	9875,39063	23751
85	182,211765	97,2117647	33201,1272	9450,1272	23751
86	181,087209	95,0872093	32792,5774	9041,57737	23751
87	180	93	32400	8649	23751 OK
88	178,948864	90,9488636	32022,6958	8271,6958	23751
89	177,932584	88,9325843	31660,0045	7909,00454	23751
90	176,95	86,95	31311,3025	7560,3025	23751
91	176	85	30976	7225	23751 OK
92	175,081522	83,0815217	30653,5393	6902,53925	23751
93	174,193548	81,1935484	30343,3923	6592,3923	23751
94	173,335106	79,3351064	30045,0591	6294,0591	23751
95	172,505263	77,5052632	29758,0658	6007,06582	23751
96	171,703125	75,703125	29481,9631	5730,96313	23751
97	170,927835	73,9278351	29216,3248	5465,3248	23751

98	170,178571	72,1785714	28960,7462	5209,74617	23751
99	169,454545	70,4545455	28714,843	4963,84298	23751
100	168,755	68,755	28478,25	4727,25003	23751
101	168,079208	67,0792079	28250,6201	4499,62014	23751
102	167,426471	65,4264706	28031,6231	4280,62305	23751
103	166,796117	63,7961165	27820,9445	4069,94448	23751
104	166,1875	62,1875	27618,2852	3867,28516	23751
105	165,6	60,6	27423,36	3672,36	23751
106	165,033019	59,0330189	27235,8973	3484,89732	23751
107	164,485981	57,4859813	27055,638	3304,63805	23751
108	163,958333	55,9583333	26882,3351	3131,33507	23751
109	163,449541	54,4495413	26715,7525	2964,75255	23751
110	162,959091	52,9590909	26555,6653	2804,66531	23751
111	162,486486	51,4864865	26401,8583	2650,85829	23751
112	162,03125	50,03125	26254,126	2503,12598	23751
113	161,59292	48,5929204	26112,2719	2361,27191	23751
114	161,171053	47,1710526	25976,1082	2225,10821	23751
115	160,765217	45,7652174	25845,4551	2094,45512	23751
116	160,375	44,375	25720,1406	1969,14063	23751
117	160	43	25600	1849	23751 OK
118	159,639831	41,6398305	25484,8755	1733,87548	23751
119	159,294118	40,2941176	25374,6159	1623,61592	23751
120	158,9625	38,9625	25269,0764	1518,07641	23751
121	158,644628	37,6446281	25168,118	1417,11802	23751
122	158,340164	36,3401639	25071,6075	1320,60751	23751
123	158,04878	35,0487805	24979,417	1228,41701	23751
124	157,770161	33,7701613	24891,4238	1140,42379	23751
125	157,504	32,504	24807,51	1056,51002	23751
126	157,25	31,25	24727,5625	976,5625	23751
127	157,007874	30,007874	24651,4725	900,472503	23751
128	156,777344	28,7773438	24579,1355	828,135513	23751
129	156,55814	27,5581395	24510,4511	759,451055	23751
130	156,35	26,35	24445,3225	694,3225	23751
131	156,152672	25,1526718	24383,6569	632,656896	23751
132	155,965909	23,9659091	24325,3648	574,364799	23751
133	155,789474	22,7894737	24270,3601	519,360111	23751
134	155,623134	21,6231343	24218,5599	467,559938	23751

135	155,466667	20,4666667	24169,8844	418,884444	23751
136	155,319853	19,3198529	24124,2567	373,256718	23751
137	155,182482	18,1824818	24081,6026	330,602643	23751
138	155,054348	17,0543478	24041,8508	290,85078	23751
139	154,935252	15,9352518	24004,9322	253,93225	23751
140	154,825	14,825	23970,7806	219,780625	23751
141	154,723404	13,7234043	23939,3318	188,331824	23751
142	154,630282	12,6302817	23910,524	159,524016	23751
143	154,545455	11,5454545	23884,2975	133,297521	23751
144	154,46875	10,46875	23860,5947	109,594727	23751
145	154,4	9,4	23839,36	88,36	23751
146	154,339041	8,3390411	23820,5396	69,5396064	23751
147	154,285714	7,28571429	23804,0816	53,0816327	23751
148	154,239865	6,23986486	23789,9359	38,9359135	23751
149	154,201342	5,20134228	23778,054	27,0539615	23751
150	154,17	4,17	23768,3889	17,3889	23751
151	154,145695	3,14569536	23760,8954	9,89539932	23751
152	154,128289	2,12828947	23755,5296	4,52961608	23751
153	154,117647	1,11764706	23752,2491	1,24913495	23751
154	154,113636	0,11363636	23751,0129	0,01291322	23751