

## Lagrange's Four-Square Theorem

0	=	$0^2 + 0^2 + 0^2 + 0^2$
1	=	$1^2 + 0^2 + 0^2 + 0^2$
2	=	$1^2 + 1^2 + 0^2 + 0^2$
3	=	$1^2 + 1^2 + 1^2 + 0^2$
4	=	$1^2 + 1^2 + 1^2 + 1^2$
	=	$2^2 + 0^2 + 0^2 + 0^2$
5	=	$2^2 + 1^2 + 0^2 + 0^2$
6	=	$2^2 + 1^2 + 1^2 + 0^2$
7	=	$2^2 + 1^2 + 1^2 + 1^2$
8	=	$2^2 + 2^2 + 0^2 + 0^2$
9	=	$2^2 + 2^2 + 1^2 + 0^2$
	=	$3^2 + 0^2 + 0^2 + 0^2$
10	=	$2^2 + 2^2 + 1^2 + 1^2$
	=	$3^2 + 1^2 + 0^2 + 0^2$
11	=	$3^2 + 1^2 + 1^2 + 0^2$
12	=	$2^2 + 2^2 + 2^2 + 0^2$
	=	$3^2 + 1^2 + 1^2 + 1^2$
13	=	$2^2 + 2^2 + 2^2 + 1^2$
	=	$3^2 + 2^2 + 0^2 + 0^2$
14	=	$3^2 + 2^2 + 1^2 + 0^2$
15	=	$3^2 + 2^2 + 1^2 + 1^2$
16	=	$2^2 + 2^2 + 2^2 + 2^2$
	=	$4^2 + 0^2 + 0^2 + 0^2$
17	=	$3^2 + 2^2 + 2^2 + 0^2$
	=	$4^2 + 1^2 + 0^2 + 0^2$
18	=	$3^2 + 2^2 + 2^2 + 1^2$
	=	$3^2 + 3^2 + 0^2 + 0^2$
	=	$4^2 + 1^2 + 1^2 + 0^2$
19	=	$3^2 + 3^2 + 1^2 + 0^2$
	=	$4^2 + 1^2 + 1^2 + 1^2$
20	=	$3^2 + 3^2 + 1^2 + 1^2$
	=	$4^2 + 2^2 + 0^2 + 0^2$
21	=	$3^2 + 2^2 + 2^2 + 2^2$
	=	$4^2 + 2^2 + 1^2 + 0^2$
22	=	$3^2 + 3^2 + 2^2 + 0^2$
	=	$4^2 + 2^2 + 1^2 + 1^2$
23	=	$3^2 + 3^2 + 2^2 + 1^2$
24	=	$4^2 + 2^2 + 2^2 + 0^2$
25	=	$4^2 + 2^2 + 2^2 + 1^2$
	=	$4^2 + 3^2 + 0^2 + 0^2$
26	=	$5^2 + 0^2 + 0^2 + 0^2$
	=	$3^2 + 3^2 + 2^2 + 2^2$
	=	$4^2 + 3^2 + 1^2 + 0^2$
27	=	$5^2 + 1^2 + 0^2 + 0^2$
	=	$3^2 + 3^2 + 3^2 + 0^2$
	=	$4^2 + 3^2 + 1^2 + 1^2$
28	=	$5^2 + 1^2 + 1^2 + 1^2$
	=	$3^2 + 3^2 + 2^2 + 2^2$
	=	$4^2 + 2^2 + 2^2 + 2^2$
29	=	$5^2 + 2^2 + 0^2 + 0^2$
	=	$3^2 + 3^2 + 2^2 + 0^2$
30	=	$5^2 + 2^2 + 2^2 + 1^2$
	=	$4^2 + 3^2 + 2^2 + 0^2$
31	=	$5^2 + 2^2 + 2^2 + 1^2$
	=	$4^2 + 2^2 + 1^2 + 1^2$
32	=	$5^2 + 2^2 + 2^2 + 0^2$
33	=	$4^2 + 3^2 + 2^2 + 2^2$
	=	$4^2 + 4^2 + 1^2 + 0^2$
34	=	$5^2 + 2^2 + 2^2 + 0^2$
	=	$4^2 + 4^2 + 1^2 + 1^2$
	=	$5^2 + 2^2 + 2^2 + 1^2$
35	=	$5^2 + 3^2 + 3^2 + 1^2$
	=	$5^2 + 3^2 + 1^2 + 0^2$
36	=	$5^2 + 3^2 + 3^2 + 3^2$
	=	$4^2 + 4^2 + 2^2 + 0^2$
	=	$5^2 + 3^2 + 1^2 + 1^2$
37	=	$6^2 + 0^2 + 0^2 + 0^2$
	=	$4^2 + 4^2 + 2^2 + 1^2$
	=	$5^2 + 2^2 + 2^2 + 2^2$
38	=	$6^2 + 1^2 + 0^2 + 0^2$
	=	$4^2 + 3^2 + 3^2 + 2^2$
	=	$5^2 + 3^2 + 2^2 + 0^2$
39	=	$6^2 + 1^2 + 2^2 + 1^2$
	=	$5^2 + 3^2 + 2^2 + 1^2$
40	=	$6^2 + 1^2 + 2^2 + 2^2$
	=	$4^2 + 4^2 + 2^2 + 2^2$
41	=	$6^2 + 2^2 + 1^2 + 0^2$
	=	$5^2 + 4^2 + 0^2 + 0^2$
42	=	$6^2 + 2^2 + 2^2 + 1^2$
	=	$5^2 + 3^2 + 2^2 + 2^2$
	=	$6^2 + 4^2 + 1^2 + 0^2$
43	=	$6^2 + 2^2 + 2^2 + 1^2$
	=	$5^2 + 4^2 + 1^2 + 1^2$
44	=	$6^2 + 2^2 + 3^2 + 1^2$
	=	$5^2 + 3^2 + 2^2 + 0^2$
45	=	$6^2 + 2^2 + 3^2 + 2^2$
	=	$5^2 + 4^2 + 2^2 + 0^2$
	=	$6^2 + 2^2 + 2^2 + 1^2$
46	=	$6^2 + 2^2 + 2^2 + 1^2$
	=	$5^2 + 3^2 + 1^2 + 1^2$
47	=	$6^2 + 2^2 + 3^2 + 2^2$
	=	$5^2 + 3^2 + 1^2 + 2^2$
48	=	$6^2 + 2^2 + 3^2 + 3^2$
	=	$4^2 + 4^2 + 4^2 + 0^2$
49	=	$6^2 + 2^2 + 3^2 + 4^2$
	=	$5^2 + 4^2 + 2^2 + 2^2$
	=	$6^2 + 3^2 + 2^2 + 0^2$
50	=	$6^2 + 2^2 + 4^2 + 3^2$
	=	$5^2 + 4^2 + 3^2 + 0^2$
	=	$6^2 + 5^2 + 0^2 + 0^2$
	=	$6^2 + 3^2 + 2^2 + 1^2$
51	=	$6^2 + 2^2 + 2^2 + 1^2$
	=	$5^2 + 5^2 + 1^2 + 0^2$
52	=	$6^2 + 2^2 + 4^2 + 2^2$
	=	$5^2 + 3^2 + 3^2 + 3^2$
	=	$6^2 + 5^2 + 1^2 + 1^2$
53	=	$6^2 + 2^2 + 4^2 + 0^2$
	=	$5^2 + 4^2 + 2^2 + 0^2$
54	=	$6^2 + 2^2 + 4^2 + 1^2$
	=	$5^2 + 3^2 + 2^2 + 0^2$
	=	$6^2 + 4^2 + 1^2 + 0^2$
55	=	$6^2 + 2^2 + 4^2 + 2^2$
	=	$5^2 + 3^2 + 2^2 + 1^2$
56	=	$6^2 + 2^2 + 4^2 + 3^2$
	=	$5^2 + 4^2 + 2^2 + 2^2$
57	=	$6^2 + 2^2 + 4^2 + 4^2$
	=	$5^2 + 4^2 + 3^2 + 0^2$
58	=	$6^2 + 2^2 + 4^2 + 5^2$
	=	$5^2 + 4^2 + 4^2 + 2^2$
59	=	$6^2 + 2^2 + 4^2 + 6^2$
	=	$5^2 + 4^2 + 5^2 + 0^2$
60	=	$6^2 + 2^2 + 4^2 + 7^2$
	=	$5^2 + 4^2 + 6^2 + 0^2$
61	=	$6^2 + 2^2 + 4^2 + 8^2$
	=	$5^2 + 4^2 + 7^2 + 0^2$
62	=	$6^2 + 2^2 + 4^2 + 9^2$
	=	$5^2 + 4^2 + 8^2 + 0^2$
63	=	$6^2 + 2^2 + 4^2 + 10^2$
	=	$5^2 + 4^2 + 9^2 + 0^2$
64	=	$6^2 + 2^2 + 4^2 + 11^2$
	=	$5^2 + 4^2 + 10^2 + 0^2$
65	=	$6^2 + 2^2 + 4^2 + 12^2$
	=	$5^2 + 4^2 + 11^2 + 0^2$
66	=	$6^2 + 2^2 + 4^2 + 13^2$
	=	$5^2 + 4^2 + 12^2 + 0^2$
67	=	$6^2 + 2^2 + 4^2 + 14^2$
	=	$5^2 + 4^2 + 13^2 + 0^2$
68	=	$6^2 + 2^2 + 4^2 + 15^2$
	=	$5^2 + 4^2 + 14^2 + 0^2$
69	=	$6^2 + 2^2 + 4^2 + 16^2$
	=	$5^2 + 4^2 + 15^2 + 0^2$
70	=	$6^2 + 2^2 + 4^2 + 17^2$
	=	$5^2 + 4^2 + 16^2 + 0^2$
71	=	$6^2 + 2^2 + 4^2 + 18^2$
	=	$5^2 + 4^2 + 17^2 + 0^2$
72	=	$6^2 + 2^2 + 4^2 + 19^2$
	=	$5^2 + 4^2 + 18^2 + 0^2$
73	=	$6^2 + 2^2 + 4^2 + 20^2$
	=	$5^2 + 4^2 + 19^2 + 0^2$
74	=	$6^2 + 2^2 + 4^2 + 21^2$
	=	$5^2 + 4^2 + 20^2 + 0^2$
75	=	$6^2 + 2^2 + 4^2 + 22^2$
	=	$5^2 + 4^2 + 21^2 + 0^2$
76	=	$6^2 + 2^2 + 4^2 + 23^2$
	=	$5^2 + 4^2 + 22^2 + 0^2$
77	=	$6^2 + 2^2 + 4^2 + 24^2$
	=	$5^2 + 4^2 + 23^2 + 0^2$
78	=	$6^2 + 2^2 + 4^2 + 25^2$
	=	$5^2 + 4^2 + 24^2 + 0^2$
79	=	$6^2 + 2^2 + 4^2 + 26^2$
	=	$5^2 + 4^2 + 25^2 + 0^2$
80	=	$6^2 + 2^2 + 4^2 + 27^2$
	=	$5^2 + 4^2 + 26^2 + 0^2$
81	=	$6^2 + 2^2 + 4^2 + 28^2$
	=	$5^2 + 4^2 + 27^2 + 0^2$
82	=	$6^2 + 2^2 + 4^2 + 29^2$
	=	$5^2 + 4^2 + 28^2 + 0^2$
83	=	$6^2 + 2^2 + 4^2 + 30^2$
	=	$5^2 + 4^2 + 29^2 + 0^2$
84	=	$6^2 + 2^2 + 4^2 + 31^2$
	=	$5^2 + 4^2 + 30^2 + 0^2$
85	=	$6^2 + 2^2 + 4^2 + 32^2$
	=	$5^2 + 4^2 + 31^2 + 0^2$
86	=	$6^2 + 2^2 + 4^2 + 33^2$
	=	$5^2 + 4^2 + 32^2 + 0^2$
87	=	$6^2 + 2^2 + 4^2 + 34^2$
	=	$5^2 + 4^2 + 33^2 + 0^2$
88	=	$6^2 + 2^2 + 4^2 + 35^2$
	=	$5^2 + 4^2 + 34^2 + 0^2$
89	=	$6^2 + 2^2 + 4^2 + 36^2$
	=	$5^2 + 4^2 + 35^2 + 0^2$
90	=	$6^2 + 2^2 + 4^2 + 37^2$
	=	$5^2 + 4^2 + 36^2 + 0^2$
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