

Another trimagic square which can be derived from the original square 1a

On 2018-03-01 Holger Danielsson sent us a new trimagic square of order 12.

He found a pair of 3-equivalent 4-tuples in the square **1b**.

Thus it is possible to derive this new square from the square **1a** found in 2002.

After nearly 16 years Holger Danielsson was the first who discovered this.

Trimagic square 1b with colored pair of 3-equivalent 4-tuples

18	17	79	19	46	102	129	52	131	113	108	56
6	20	41	86	91	49	116	115	48	121	42	135
34	63	22	76	117	8	98	119	141	64	101	27
65	94	144	23	13	71	87	136	70	72	5	90
105	31	33	142	68	106	84	45	35	2	124	95
53	120	83	78	134	133	7	38	88	36	85	15
92	25	62	67	11	12	138	107	57	109	60	130
40	114	112	3	77	39	61	100	110	143	21	50
80	51	1	122	132	74	58	9	75	73	140	55
111	82	123	69	28	137	47	26	4	81	44	118
139	125	104	59	54	96	29	30	97	24	103	10
127	128	66	126	99	43	16	93	14	32	37	89

Trimagic square 1c with swapped 4-tuples

18	17	79	19	46	102	129	52	131	113	108	56
6	20	41	86	91	49	116	115	48	121	42	135
34	63	22	76	117	8	98	119	141	64	101	27
65	94	136	23	13	71	87	144	70	72	5	90
105	31	33	142	68	106	84	45	35	2	124	95
53	120	38	78	134	133	7	83	88	36	85	15
92	25	107	67	11	12	138	62	57	109	60	130
40	114	112	3	77	39	61	100	110	143	21	50
80	51	9	122	132	74	58	1	75	73	140	55
111	82	123	69	28	137	47	26	4	81	44	118
139	125	104	59	54	96	29	30	97	24	103	10
127	128	66	126	99	43	16	93	14	32	37	89

See also: [p-equivalent k-tuples.pdf](#)