UNEXPLAINED COINCIDENCES FOR 12

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Abstract. The following coincidences are found by first applying the Shading Algorithm to get all coincidence classes on the pattern 12. Then for each class we pick (one of) the least shaded pattern(s) and compute the avoiding permutations of lengths $0, \ldots, 7$. If two (or more) classes turn out to have the same avoiding permutations they are listed together below.

1. Parameters used by the Shading Algorithm

depth	multbox	q_check	forcelen	#united
-1	False	False	0	275
1	False	False	1	0
1	False	False	2	0
1	False	True	1	8
1	False	True	2	0
1	True	False	1	0
1	True	False	2	8
1	True	True	1	0
1	True	True	2	0
2	False	False	1	0
2	False	False	2	0
2	False	True	1	0
2	False	True	2	0
2	True	False	1	0
2	True	False	2	0
2	True	True	1	1
2	True	True	2	0
3	False	False	1	0
3	False	False	2	0
3	False	True	1	0
3	False	True	2	0
3	True	False	1	0
3	True	False	2	0
3	True	True	1	0
3	True	True	2	0
4	False	False	1	0
4	False	False	2	0

Key words and phrases. Permutation Patterns.

4	False	True	1	0
4	False	True	2	0
4	True	False	1	0
4	True	False	2	0
4	True	True	1	0
4	True	True	2	0
5	False	False	1	0
5	False	False	2	0
5	False	True	1	0
5	False	True	2	0
5	True	False	1	0
5	True	False	2	0
5	True	True	1	0
5	True	True	2	0
6	False	False	1	0
6	False	False	2	0
6	False	True	1	0
6	False	True	2	0
6	True	False	1	0
6	True	False	2	0
6	True	True	1	0
6	True	True	2	0
7	False	False	1	0
7	False	False	2	0
7	False	True	1	0
7	False	True	2	0
7	True	False	1	0
7	True	False	2	0
7	True	True	1	0
7	True	True	2	0
8	False	False	1	0
8	False	False	2	0
8	False	True	1	0
8	False	True	2	0
8	True	False	1	0
8	True	False	2	0
8	True	True	1	0
8	True	True	2	0
9	False	False	1	0
9	False	False	2	0
9	False	True	1	0
9	False	True	2	0
9	True	False	1	0
9	True	False	2	0
9	True	True	1	0

9	True	True	2	0

2. Coincidences

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