

# Summary of impossibility proofs - Multimagic series, orders 16 to 65

Ex : (2P) means proof modulo 2 penta

If (..)(..), proofs may be used separately,

ex : (2H)(3H)

If (..+..), proofs must be used simultaneously,

ex : (2Tb+2P)

If blue background = known existing series

If white background = unknown status

If pink background, impossible orders 4k+2  
(trimagic series are impossible)

*If italics = only a part of series is eliminated,  
not all of them*

If SPE = specific impossibility proof  
(for Hexa 16, 33, 63, 65)

**If bold = new impossibility proof, which was  
not yet known**

**(Penta 31**

**& Hexa 43, 44, 47, 48, 49, 52, 60, 63, 65)**

	Tetra	Penta	Hexa
16			(5H+SPE)
17	(2Ta+2Tb)	(2Ta+2P)	(3H)
18	x	x	x
19		(2P)	(2H)(3H)(7H)
20			(2H)(7H)
21			(2H)(3H)
22	x	x	x
23		(2P)	(2H)(7H)
24			(3H)
25	(2Ta)	(2Ta+2P)	(2H)
26	x	x	x
27			
28			(2H)(3H)
29			(2H)
30	x	x	x
31	(2Tb)	<b>(2Tb+2P)</b>	(2H)(3H)(7H)
32			(3H)
33	(2Tb)	(2P)	(2Tb+2P+SPE)
34	x	x	x
35			(3H)
36			(2H)
37			(2H)(3H)
38	x	x	x
39		(2P)	(3H)
40			
41		(2P)	
42	x	x	x
43			<b>(3H)</b>
44			<b>(2H)</b>
45			
46	x	x	x
47	(2Tb)	(2P)	<b>(2H)(3H)</b>
48			<b>(3H)</b>
49	(2Ta+2Tb)	(2P)	<b>(2Ta.b+2P+2H)</b>
50	x	x	x
51			
52			<b>(2H)</b>
53			
54	x	x	x
55		(2P)	
56			
57	(2Ta)	(2P)	
58	x	x	x
59			
60			<b>(2H)</b>
61			
62	x	x	x
63	(2Tb)	(2P)	<b>(2H+SPE)</b>
64			
65	(2Tb)	(2P)	<b>(2H+SPE)</b>