

Romanian Dual Calendar Cube Mapping

In the mapping process of a calendar cube texture, all stickers are numbered from 0 to 53 as shown on the reference 3x3x3 numbered cube below. By doing so, each letter, number and blank of any calendar cube texture can be uniquely identified. The result of the mapping process is used as an input to the [CubeSynthesizer3](#) computer program, which will then synthesize all the 2562 algorithms used to animate this perpetual calendar.

Many animated calendar cubes can be found by browsing through pages of website:

http://www.randelshofer.ch/rubik/virtualcubes/virtual_rubik_en.html

Romanian Dual Calendar Cube																																																													
<p>Romanian Dual Calendar Cube</p> <p>Original design 2010 by Stefan Berinde</p> <p>Copyright © 2010 Walter Randelshofer Werner Randelshofer All rights reserved.</p> <p>Texture</p>	<p>Friday, December 31</p>																																																												
Synthesized Algorithm																																																													
Friday, December 31 CR' D' B' D MR' B2 MR R' B2 SR B' L																																																													
Reference 3x3x3 Numbered Cube																																																													
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Romanian Dual Calendar Cube Mapping – Weekdays

Letters						Weekdays	
Left	Numbering	Middle	Numbering	Right	Numbering	Weekday	Numbering
Dumini	11	că	25	b2	2	Sunday	0
Lun	0	i	1	b2	2	Monday	1
Marț	29	i	1	b2	2	Tuesday	2
Miercu	24	ri	19	b2	2	Wednesday	3
Jo	26	i	1	b20	20	Thursday	4
Vine	9	ri	19	b20	20	Friday	5
Sâm	45	bătă	46	b2	2	Saturday	6

Note 1: Weekday numbering begins with Sunday (for compatibility with JavaScript coding)

Romanian Dual Calendar Cube Mapping – Months

Letters						Months	
Left	Numbering	Middle	Numbering	Right	Numbering	Month	Numbering
I	3	A	4	N	5	January	0
F	10	E	22	B	12	February	1
M	16	A	4	R	30	March	2
A	48	P	13	R	30	April	3
M	16	A	4	I	3	May	4
I	3	U	49	N	5	June	5
I	3	U	49	L	39	July	6
A	48	U	49	G	50	August	7
S	14	E	22	P	34	September	8
O	41	C	31	T	32	October	9
N	5	O	40	I	3	November	10
D	21	E	22	C	23	December	11

Romanian Dual Calendar Cube Mapping – Days

Left	Numbering	Middle	Numbering	Right	Numbering	Day	Numbering
b6	6	b7	7	1	8	1	1
b6	6	b7	7	2	15	2	2
b6	6	b7	7	3	18	3	3
b6	6	b7	7	4	27	4	4
b6	6	b7	7	5	44	5	5
b6	6	b7	7	6	17	6	6
b6	6	b7	7	7	42	7	7
b6	6	b7	7	8	53	8	8
b33	33	b7	7	9	36	9	9
b6	6	1	52	0	38	10	10
b6	6	1	52	1	8	11	11
b6	6	1	52	2	15	12	12
b6	6	1	52	3	18	13	13
b6	6	1	52	4	27	14	14
b6	6	1	52	5	44	15	15
b6	6	1	52	6	17	16	16
b6	6	1	52	7	42	17	17
b6	6	1	52	8	53	18	18
b33	33	1	52	9	36	19	19
b6	6	2	43	0	38	20	20
b6	6	2	43	1	8	21	21
b6	6	2	43	2	15	22	22
b6	6	2	43	3	18	23	23
b6	6	2	43	4	27	24	24
b6	6	2	43	5	44	25	25
b6	6	2	43	6	17	26	26
b6	6	2	43	7	42	27	27
b6	6	2	43	8	53	28	28
b33	33	2	43	9	36	29	29
b6	6	3	37	0	38	30	30
b6	6	3	37	1	8	31	31

Note 2: Blank b33 left is used with number 9 right

CubeSynthesizer3 Input Form – Romanian Dual Calendar Cube

The screenshot displays the 'CubeSynthesizer3 - 3x3x3 Cubes - Developer's Version 1.1' spreadsheet. The main data table is as follows:

Index	Moves	Weekdays	Days	Months
0	8	Sunday	1	January
1	0	Monday	1	January
2	6	Tuesday	1	January
3	9	Wednesday	1	January
4	1	Thursday	1	January
5	2	Friday	1	January
6	3	Saturday	1	January
7	4	Sunday	1	January
8	5	Monday	1	January
9	6	Tuesday	1	January
10	7	Wednesday	1	January
11	8	Thursday	1	January
12	9	Friday	1	January
13	10	Saturday	1	January
14	11	Sunday	1	January
15	12	Monday	1	January
16	13	Tuesday	1	January
17	14	Wednesday	1	January
18	15	Thursday	1	January
19	16	Friday	1	January
20	17	Saturday	1	January
21	18	Sunday	1	January
22	19	Monday	1	January
23	20	Tuesday	1	January
24	21	Wednesday	1	January
25	22	Thursday	1	January
26	23	Friday	1	January
27	24	Saturday	1	January
28	25	Sunday	1	January
29	26	Monday	1	January
30	27	Tuesday	1	January
31	28	Wednesday	1	January
32	29	Thursday	1	January
33	30	Friday	1	January
34	31	Saturday	1	January
35	32	Sunday	1	January
36	33	Monday	1	January
37	34	Tuesday	1	January
38	35	Wednesday	1	January
39	36	Thursday	1	January
40	37	Friday	1	January

The 'Cube Synthesizer Input Form' dialog box is open, showing the following settings:

- Calendar Cubes:
 - Languages:
 - Basque
 - Czech
 - Polish
 - Romanian
 - Romanian - Dual
 - Algorithm:
 - JavaScript

2562 optimized algorithms – Average number of moves: 20

Design Notes

Romanian calendar

Romanian Calendar				
Months			Weekdays	
English	Romanian		English	Romanian
January	<u>I</u> ANuarie	Ianuarie	Monday	Luni
February	<u>F</u> EBruarie	Februarie	Tuesday	Marti
March	<u>M</u> ARtie	Martie	Wednesday	Miercuri
April	<u>A</u> PRilie	Aprilie	Thursday	Joi
May	<u>M</u> AI	Mai	Friday	Vineri
June	<u>I</u> UNie	Iunie	Saturday	Sâmbătă
July	<u>I</u> ULie	Iulie	Sunday	Duminică
August	<u>A</u> UGust	August		
September	<u>S</u> EPtembrie	Septembrie		
October	<u>O</u> CTobrie	Octobrie		
November	<u>N</u> OIembrie	Noiembrie		
December	<u>D</u> ECembrie	Decembrie		
8 letters on M iddle L eft edge cubes			I F M A S O N D	
6 letters on M iddle C enter cubes			A E P U C O	
9 letters on M iddle R ight edge cubes			N B R I L G P T C	
Letters 'I', 'O' and 'N' can be used either M iddle L eft or M iddle R ight				

Top Layer – Weekdays

3 corners: (Lun, Mar, Miercu), (Jo, Vine, blank2), (Sâm, Dumini, blank20)

2 edges: (că, i), (ri, bătă)

Middle Layer – Months

6 true centers: (A, P, E, C, O, U)

8 edges: (I, T), (N, B), (F, C), (N, D), (P, L), (O, M), (A, S), (G, R)

Bottom Layer – Days

5 corners: (0, 1, 2), (3, 4, blank47), (5, 6, blank51), (7, 8, blank33), (9, blank6, blank35)

2 edges: (1, 2), (3, blank7)

All Layers

Corners = 3 + 5 = 8 ---- OK

Edges = 2 + 8 + 2 = 12 ---- OK

True centers = 6 ---- OK

Blanks

blank2: can't be used with weekdays beginning with Jo, Vine

blank20: can't be used with weekdays beginning with Sâm, Dumini

Hint: Use blank20 for Jo, Vine and blank2 for all other weekdays

blank7: can't be used with days beginning with 3

Hint: Use blank7 for days 1...29

blank47: can't be used with days ending with 3, 4

blank51: can't be used with days ending with 5, 6

blank33: can't be used with days ending with 7, 8

blank6: can't be used with days ending with 9

blank35: can't be used with days ending with 9

Hint: Use blank33 for days ending with 9 and blank6 for all other days