

The Scale-Tree from 0/1 to ~~X~~[?] is taken ^{as} in ~~the~~
a generalized keyboard guide, ~~in order~~. Assign
 x, y co-ordinates to the Scale-Tree (7 x); the
top number to x and the bottom number (12 y) to y .
Also assign a set of x, y coordinates to the
gral Keyboard as shown in fig 1 (Co-prime Triangularis) -
and map the x, y Scale-Tree to the x, y Keyboard.
A co-prime pattern ~~is~~ th result.

9/31 = .290322580645...

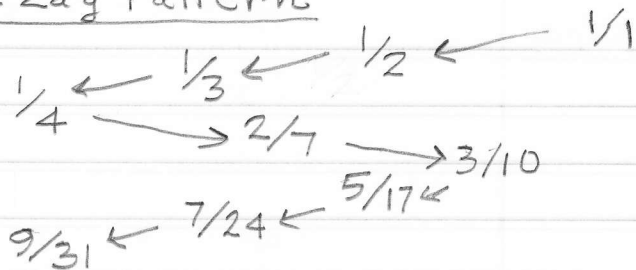
24 JAN 00. EW

1/n Pattern

0/1

Zig-Zag Pattern

	.290
3	.444
2	.250
4	.000



○
0n, 0y

○
0n, 1y

← S.B
above line

○
1n, 0y

○
0n, 0y

○
0n, 1y

○
1n, 1y

○
0n, 0y

○
0n, 1y

○
1n, 2y

○
0n, 0y

○
0n, 1y

○
1n, 3y

○
0n, 0y

○
1n, 1y

○
4n, 3y

○
0n, 0y

○
2n, 1y

○
7n, 3y

○
0n, 0y

○
2n, 3y

○
7n, 10y

○
0n, 0y

○
2n, 5y

○
7n, 17y

○
0n, 0y

○
2n, 7y

○
7n, 24y

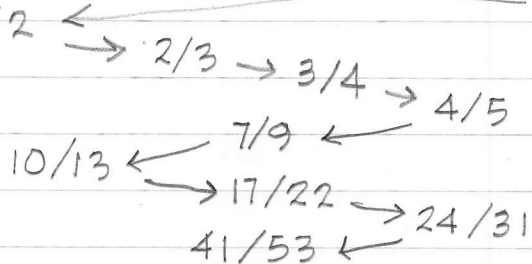
$$41/53 = .773584905660\dots$$

27JAN00.EW

1/n Pattern
.773..

Zig-Zag Pattern
0/1 1/2

←	1	.292
→	3	.416
←	2	.400
→	2	.500
←	2	.000



<u>Root</u>	<u>Generator</u>	<u>Octave</u>	<u>Gen.</u>	<u>Oct.</u>	<u>MOS</u>	<u>Dec.</u>
○	○	○	<u>n</u> 0	1	1	1.0000
0n, 0y	0n, 1y	1n, 0y	<u>y</u> 1	0	1	←
○	○	○	0	1	1	.5000
0n, 0y	0n, 1y	1n, 1y	1	1	2	→
○	○	○	1	1	2	.6667
0n, 0y	1n, 1y	2n, 1y	2	1	3	→
○	○	○	2	1	3	.7500
0n, 0y	2n, 1y	3n, 1y	3	1	4	→
○	○	○	3	1	4	.8000
0n, 0y	3n, 1y	4n, 1y	4	1	5	←
○	○	○	3	4	7	.7778
0n, 0y	3n, 4y	4n, 5y	4	5	9	←
○	○	○	3	7	10	.7692
0n, 0y	3n, 7y	4n, 9y	4	9	13	→
○	○	○	10	7	17	.7727
0n, 0y	10n, 7y	13n, 9y	13	9	22	→
○	○	○	17	7	24	.7742
0n, 0y	17n, 7y	22n, 9y	22	9	31	←
○	○	○	17	24	41	.7735849
0n, 0y	17n, 24y	22n, 31y	22	31	53	<u>.7735849</u>

$$18/31 = .580645161290\dots$$

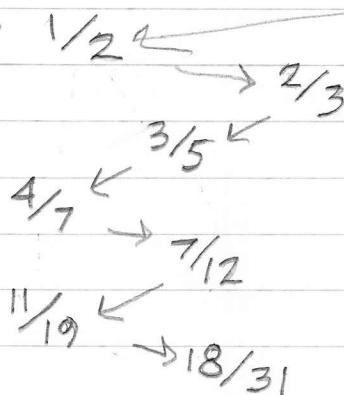
24 JAN 00. EW

1/x Pattern

Zig-Zag Pattern

1/1

- .580...
- ← 1 .722
- 1 .384
- ← 2 .600
- 1 .666
- ← 1 .500
- 2 .000



Root

Generator

Octave

○
0x, 0y ○
0x, 1y ○
1x, 0y

○
0x, 0y ○
0x, 1y ○
1x, 1y

○
0x, 0y ○
1x, 1y ○
2x, 1y

○
0x, 0y ○
1x, 2y ○
2x, 3y

Uath ○
0x, 0y ○
1x, 3y ○
2x, 5y

Bosamquet ○
0x, 0y ○
4x, 3y ○
7x, 5y

○
0x, 0y ○
4x, 7y ○
7x, 12y

○
0x, 0y ○
11x, 7y ○
19x, 12y

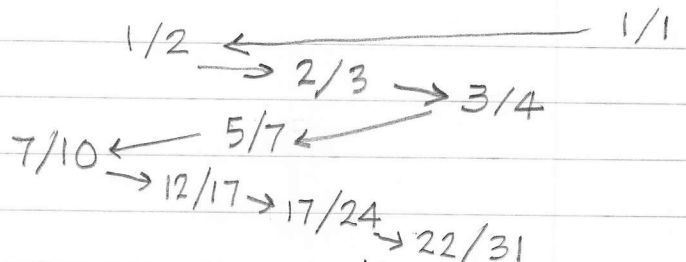
$$22/31 = .709677419355\dots$$

27JAN00.8W

1/x Pattern

Zig-Zag Pattern

		.709...	0/1
←	1	.409	
→	2	.444	
←	2	.250	
→	4	.000	



Root

Generator

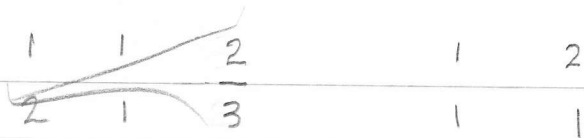
Octave

Algorithm
Gen Oct Mos Decimal

○ 0N, 0y	○ 0N, 1y	○ 1N, 0y	0	1	1	1.0000
			1	0	1	
					←	
○ 0N, 0y	○ 0N, 1y	○ 1N, 1y	0	1	1	.5000
			1	1	2	
					→	
○ 0N, 0y	○ 1N, 1y	○ 2N, 1y	1	1	2	.6667
			2	1	3	
					→	
○ 0N, 0y	○ 2N, 1y	○ 3N, 1y	2	1	3	.7500
			3	1	4	
					←	
○ 0N, 0y	○ 2N, 3y	○ 3N, 4y	2	3	5	.7143
			3	4	7	
					←	
○ 0N, 0y	○ 2N, 5y	○ 3N, 7y	2	5	7	.7000
			3	7	10	
					→	
○ 0N, 0y	○ 7N, 5y	○ 10N, 7y	7	5	12	.7059
			10	7	17	
					→	
○ 0N, 0y	○ 12N, 5y	○ 17N, 7y	12	5	17	.7083
			17	7	24	
					→	
○ 0N, 0y	○ 17N, 5y	○ 24N, 7y	17	5	22	.7097
			24	7	31	

~~rh. side~~

about 27 Jan 06



<u>N</u>	1	<u>4</u>	3	2	<u>7</u>	5
<u>y</u>	2	7	5	1	3	2

Annotated with x, y coordinates

MOS Sequencer; 3/2 (.5849625...) and 2/1 (1.0000000...)

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28JAN00.EW

2
↓
R
↓
P

	.585	1.000	MOS	Dec.	Gen.	Oct.	MOS	Dec.
	0	1	$\frac{1}{1}$	1.000000	31	55	$\frac{86}{147}$.585034
	1	0	$\frac{1}{1}$		53	94		
			←	←				←
	0	1	$\frac{1}{2}$	.500000	31	86	$\frac{117}{200}$	.585000
	1	1	$\frac{2}{2}$		53	147		
			→	→				←
	1	1	$\frac{2}{3}$	.666667	31	117	$\frac{148}{253}$	.584980
	2	1	$\frac{3}{3}$		53	200		
			←	←				←
	1	2	$\frac{3}{5}$	.600000	31	148	$\frac{179}{306}$	.584967
	2	3	$\frac{5}{5}$		53	253		
			←	←				←
	1	3	$\frac{4}{7}$	.571429	31	179	$\frac{210}{359}$	.584958
	2	5	$\frac{7}{7}$		53	306		
			→	→				→
	4	3	$\frac{7}{12}$	.583333	210	179	$\frac{389}{665}$	.5849624
	7	5	$\frac{12}{12}$		359	306		
			→	→				→
	7	3	$\frac{10}{17}$	.588235	389	179	$\frac{568}{971}$	.5849640
	12	5	$\frac{17}{17}$		665	306		
			←	←				←
	7	10	$\frac{17}{29}$	.586207	389	568	$\frac{957}{1636}$	.5849633
	12	17	$\frac{29}{29}$		665	971		
			←	←				←
	7	17	$\frac{24}{41}$	.585366	389	957	$\frac{1346}{2301}$	.5849631
	12	29	$\frac{41}{41}$		665	1636		
			←	←				←
	7	24	$\frac{31}{53}$	.584906	389	1346	$\frac{1735}{2966}$	.5849629
	12	41	$\frac{53}{53}$		665	2301		
			→	→				←
	31	24	$\frac{55}{94}$	.585106	389	1735	$\frac{2124}{3631}$	.5849628
	53	41	$\frac{94}{94}$		665	2966		
			←	←				←

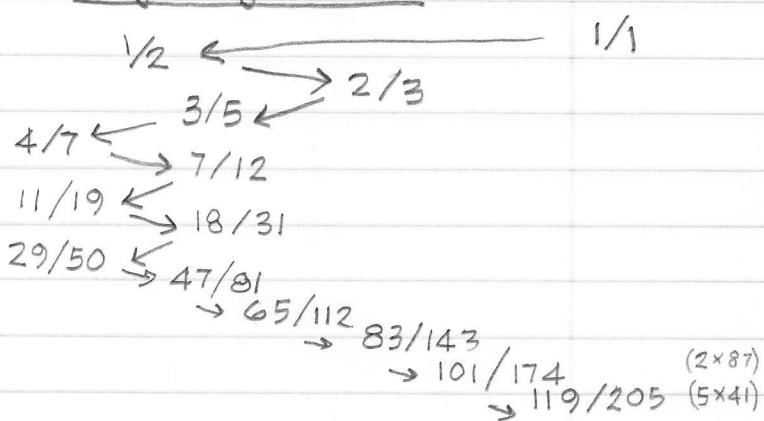
1/4 Comma Meantone Fifth = .580482023721...

3FEB00.EW

1/n Pattern

Zig-Zag Pattern

		.580482...	0/1
←	1	.722	
→	1	.383	
←	2	.606	
→	1	.649	
←	1	.539	
→	1	.852	
←	1	.173	
→	5	.765	



(cont)

Root	Gen.	8ve									
0	0	0	0	1	1	1	1.000000	11	18	29	
0n,0y	0n,1y	1n,0y	1	0	1			19	31	50	.580000
					←						
0	0	0	0	1	1	2	.500000	29	18	47	
0n,0y	0n,1y	1n,1y	1	1	2			50	31	81	.580247
					→						
0	0	0	1	1	2		.666667	47	18	65	
0n,0y	1n,1y	2n,1y	2	1	3			81	31	112	.580357
					←						
0	0	0	1	2	3		.600000	65	18	83	.580420
0n,0y	1n,2y	2n,3y	2	3	5			112	31	143	
					←						
0	0	0	1	3	4		.571429	83	18	101	.580460
0n,0y	1n,3y	2n,5y	2	5	7			143	31	174	
					→						
0	0	0	4	3	7		.583333	101	18	119	.580488
0n,0y	4n,3y	7n,5y	7	5	12			174	31	205	
					←						
0	0	0	4	7	11		.578947	101	119	220	.580475
0n,0y	4n,7y	7n,12y	7	12	19			174	205	379	
					→						
0	0	0	11	7	18		.580645	220	119	339	.580479
0n,0y	11n,7y	19n,12y	19	12	31			379	205	584	
					←						

1/4 Comma Meantone Fourth, .419517976275... 8ve

279

4FEB00·EW

a	c	e	c				
b	d	f	d				
0	1	1	1.000000	86	331	245	.419518378
1	1	0		205	789	584	
...	←				←
0	1	1	.500000	86	417	331	.419517103
1	2	1		205	994	789	
			←				→
0	1	1	.333333	417	748	331	.419517667
1	3	2		994	1783	789	
			→				→
1	2	1	.400000	748	1079	331	.419517885
3	5	2		1783	2572	789	
			→				→
2	3	1	.428571	1079	1410	331	.419518001
5	7	2		2572	3361	789	
			←				←
2	5	3	.416667	1079	2489	1410	.419517950
5	12	7		2572	5933	3361	
			→				→
5	8	3	.421053	2489	3899	1410	.419517969
12	19	7		5933	9294	3361	
			←				→
5	13	8	.419335	3899	5309	1410	.419517977084
12	31	19		9294	12655	3361	
			→				←
13	21	8	.420000	3899	9208	5309	.419517973484
31	50	19		9294	21949	12655	
			←				→
13	34	21	.419753	9208	14517	5309	.419517974800
31	81	50		21949	34604	12655	
			←				→
13	47	34	.419643	14517	19826	5309	.419517975412
31	112	81		34604	47259	12655	
			←				→
13	60	47	.419580	19826	25135	5309	.419517975766
31	143	112		47259	59914	12655	
			←				→
13	73	60	.419540	25135	30444	5309	.419517975995
31	174	143		59914	72569	12655	
			←				→
13	86	73	.419512	30444	35753	5309	.419517976157
31	205	174		72569	85224	12655	
			→				→
86	159	73	.419525	35753	41062	5309	.419517976276
205	379	174		85224	97879	12655	
			←				(→)
86	245	159	.419521	41062	46371	5309	.419517976370
205	584	379		97879	110534	12655	
			←				(←)

- 1 end here

$$(3 \leftarrow, 1 \rightarrow) \text{Limit} = .263762615826$$

Im not impressed with this

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	←			
0	1/3	1	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2	←			
0	1/4	1	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3	→			
1	2/7	1	.285714	$0x, 0y$	$1x, 1y$	$4x, 3y$
4	7	3	←			
1	3/11	2	.272727	$0x, 0y$	$1x, 2y$	$4x, 7y$
4	11	7	←			
1	4/15	3	.266667	$0x, 0y$	$1x, 3y$	$4x, 11y$
4	15	11	←			
1	5/19	4	.263158	$0x, 0y$	$1x, 4y$	$4x, 15y$
4	19	15	→			
5	9/34	4	.264706	$0x, 0y$	$5x, 4y$	$19x, 15y$
19	34	15	←			
5	14/53	9	.264151	$0x, 0y$	$5x, 9y$	$19x, 34y$
19	53	34	←			
5	19/72	14	.263889	$0x, 0y$	$5x, 14y$	$19x, 53y$
19	72	53	←			
5	24/91	19	.263736	$0x, 0y$	$5x, 19y$	$19x, 72y$
19	91	72	→			
24	43/163	19	.263804	$0x, 0y$	$24x, 19y$	$91x, 72y$
91	163	72	←			
24	67/254	43	.263780	$0x, 0y$	$24x, 43y$	$91x, 163y$
91	254	163	←			
24	91/345	67	.263768	$0x, 0y$	$24x, 67y$	$91x, 254y$
91	345	254	←			
24	115/436	91	.263761	$0x, 0y$	$24x, 91y$	$91x, 345y$
91	436	345	→			

7x13

15x23

(3→, 1←)

.736237384174

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←	$0x, 0y$	$0x, 1y$	$1x, 0y$
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	→	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1	→	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
3	4	1	←	$0x, 0y$	$2x, 1y$	$3x, 1y$
2	5	3	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$
3	7	4	→	$0x, 0y$	$2x, 3y$	$3x, 4y$
5	8	3	.727273	$0x, 0y$	$5x, 3y$	$7x, 4y$
7	11	4	→	$0x, 0y$	$5x, 3y$	$7x, 4y$
8	11	3	.733333	$0x, 0y$	$8x, 3y$	$11x, 4y$
11	15	4	→	$0x, 0y$	$8x, 3y$	$11x, 4y$
11	14	3	.736842	$0x, 0y$	$11x, 3y$	$15x, 4y$
15	19	4	←	$0x, 0y$	$11x, 3y$	$15x, 4y$
11	25	14	.735294	$0x, 0y$	$11x, 14y$	$15x, 19y$
15	34	19	→	$0x, 0y$	$11x, 14y$	$15x, 19y$
25	39	14	.735849	$0x, 0y$	$25x, 14y$	$34x, 19y$
34	53	19	→	$0x, 0y$	$25x, 14y$	$34x, 19y$
39	53	14	.736111	$0x, 0y$	$39x, 14y$	$53x, 19y$
53	72	19	→	$0x, 0y$	$39x, 14y$	$53x, 19y$
53	67	14	.736264	$0x, 0y$	$53x, 14y$	$72x, 19y$
72	91	19	←	$0x, 0y$	$53x, 14y$	$72x, 19y$
53	120	67	.736196	$0x, 0y$	$53x, 67y$	$72x, 91y$
72	163	91	→	$0x, 0y$	$53x, 67y$	$72x, 91y$
120	187	67	.736220	$0x, 0y$	$120x, 67y$	$163x, 91y$
163	254	91	→	$0x, 0y$	$120x, 67y$	$163x, 91y$
187	254	67	.736232	$0x, 0y$	$187x, 67y$	$254x, 91y$
254	345	91	→	$0x, 0y$	$187x, 67y$	$254x, 91y$
254	321	67	.736239	$0x, 0y$	$254x, 67y$	$345x, 91y$
345	436	91	←	$0x, 0y$	$254x, 67y$	$345x, 91y$

$$G = (8 + 4G)^{\frac{1}{9}} = 1.33350830845 \dots$$

$$\log_2 = \underline{.415226813657 \dots}$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	$0x, 0y$	a_n, e_y	b_n, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			←			
0/1	1/3	1/2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
			→			
1/3	2/5	1/2	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
			→			
2/5	3/7	1/2	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
			←			
2/5	5/12	3/7	.416667	$0x, 0y$	$2x, 3y$	$5x, 7y$
			←			
2/5	7/17	5/12	.411765	$0x, 0y$	$2x, 5y$	$5x, 12y$
			→			✓
7/17	12/29	5/12	.413793	$0x, 0y$	$7x, 5y$	$17x, 12y$
			→			
12/29	17/41	5/12	.414634	$0x, 0y$	$12x, 5y$	$29x, 12y$
			→			
17/41	22/53	5/12	.415094	$0x, 0y$	$17x, 5y$	$41x, 12y$
			→			
22/53	27/65	5/12	.415385	$0x, 0y$	$22x, 5y$	$53x, 12y$
			←			
22/53	49/118	27/65	.415254	$0x, 0y$	$22x, 27y$	$53x, 65y$
			←			✓
22/53	71/171	49/118	.415205	$0x, 0y$	$22x, 49y$	$53x, 118y$
			→			
71/171	120/289	49/118	.415225	$0x, 0y$	$71x, 49y$	$171x, 118y$
			→			
120/289	169/407	49/118	.415233	$0x, 0y$	$120x, 49y$	$289x, 118y$
			←			
120/289	289/696	169/407	.415230	$0x, 0y$	$120x, 169y$	$289x, 407y$
			←			

17²

29.24

$$2/1.33350830845...$$

$$\log_2 = .584773186343...$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1/2	2/3	1/1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			←			
1/2	3/5	2/3	.600000	$0x, 0y$	$1x, 2y$	$2x, 3y$
			←			
1/2	4/7	3/5	.571429	$0x, 0y$	$1x, 3y$	$2x, 5y$
			→			
4/7	7/12	3/5	.583333	$0x, 0y$	$4x, 3y$	$7x, 5y$
			→			
7/12	10/17	3/5	.588235	$0x, 0y$	$7x, 3y$	$12x, 5y$
			←			
7/12	17/29	10/17	.586207	$0x, 0y$	$7x, 10y$	$12x, 17y$
			←			
7/12	24/41	17/29	.585366	$0x, 0y$	$7x, 17y$	$12x, 29y$
			←			
7/12	31/53	24/41	.584906	$0x, 0y$	$7x, 24y$	$12x, 41y$
			←			
7/12	38/65	31/53	.584615	$0x, 0y$	$7x, 31y$	$12x, 53y$
			→			
38/65	69/118	31/53	.584746	$0x, 0y$	$38x, 31y$	$65x, 53y$
			→			
69/118	100/171	31/53	.584795	$0x, 0y$	$69x, 31y$	$118x, 53y$
			←			
69/118	169/289	100/171	.584775	$0x, 0y$	$69x, 100y$	$118x, 171y$
			←			
69/118	238/407	169/289	.584767	$0x, 0y$	$69x, 169y$	$118x, 289y$
			→			
238/407	407/696	169/289	.584770	$0x, 0y$	$238x, 169y$	$407x, 289y$
			→			

Meta-meantone Fourth

.420307968966

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	$\frac{1}{2}$	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	←			
0	$\frac{1}{3}$	1	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2	→			
1	$\frac{2}{5}$	1	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
3	5	2	→			
2	$\frac{3}{7}$	1	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
5	7	2	←			
2	$\frac{5}{12}$	3	.416667	$0x, 0y$	$2x, 3y$	$5x, 7y$
5	12	7	→			
5	$\frac{8}{19}$	3	.421053	$0x, 0y$	$5x, 3y$	$12x, 7y$
12	19	7	←			
5	$\frac{13}{31}$	8	.419355	$0x, 0y$	$5x, 8y$	$12x, 19y$
12	31	19	→			
13	$\frac{21}{50}$	8	.420000	$0x, 0y$	$13x, 8y$	$31x, 19y$
31	50	19	→			
21	$\frac{29}{69}$	8	.420290	$0x, 0y$	$21x, 8y$	$50x, 19y$
50	69	19	→			
29	$\frac{37}{88}$	8	.420455	$0x, 0y$	$29x, 8y$	$69x, 19y$
69	88	19	←			
29	$\frac{66}{157}$	37	.420382	$0x, 0y$	$29x, 37y$	$69x, 88y$
69	157	88	←			
29	$\frac{95}{226}$	66	.420354	$0x, 0y$	$29x, 66y$	$69x, 157y$
69	226	157	←			
29	$\frac{124}{295}$	95	.420339	$0x, 0y$	$29x, 95y$	$69x, 226y$
69	295	226	←			
29	$\frac{153}{364}$	124	.420330	$0x, 0y$	$29x, 124y$	$69x, 295y$
69	364	295	←			
29	$\frac{182}{433}$	153	.420323	$0x, 0y$	$29x, 153y$	$69x, 364y$
69	433	364	←			
	etc		←			

Meta
Meantone

.579692031034...

HP20S

	a	c	e	$\frac{c}{d}$ dec	Root Generator Octave
	b	d	f		$\frac{0x,0y}{ax,ey} \frac{bx,fy}$
←	0	1	1	1.000000	$0x,0y \quad 0x,1y \quad 1x,0y$
PRGM				←	
↵	0	1	1	.500000	$0x,0y \quad 0x,1y \quad 1x,1y$
LBL				→	
B	1	2	1	.666667	$0x,0y \quad 1x,1y \quad 2x,1y$
(←	
2	1	3	2	.600000	$0x,0y \quad 1x,2y \quad 2x,3y$
+				←	
2	1	4	3	.571429	$0x,0y \quad 1x,3y \quad 2x,5y$ ✓
x				→	
RCL 4	4	7	3	.583333	$0x,0y \quad 4x,3y \quad 7x,5y$
)				←	
y ^x	4	11	7	.578947	$0x,0y \quad 4x,7y \quad 7x,12y$
				→	
(	11	18	7	.580645	$0x,0y \quad 11x,7y \quad 19x,12y$
				←	
÷	11	29	18	.580000	$0x,0y \quad 11x,18y \quad 19x,31y$
4				←	
)	11	40	29	.579710	$0x,0y \quad 11x,29y \quad 19x,50y$ ✓
=				←	
STO 4	11	51	40	.579545	$0x,0y \quad 11x,40y \quad 19x,69y$
↵				→	
RTN	51	91	40	.579618	$0x,0y \quad 51x,40y \quad 88x,69y$
←				→	
PRGM	91	131	40	.579646	$0x,0y \quad 91x,40y \quad 157x,69y$
				→	
	131	171	40	.579661	$0x,0y \quad 131x,40y \quad 226x,69y$
				→	
4.7.13	171	211	40	.579670	$0x,0y \quad 171x,40y \quad 295x,69y$
				→	
	211	251	40	.579677	$0x,0y \quad 211x,40y \quad 364x,69y$
				→	

Meta-Mavila Fourth

.436385705396

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0				
			←			
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1				
			←			
0	1	1	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2				
			→			
1	2	1	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
3	5	2				
			→			
2	3	1	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
5	7	2				
			→			
3	4	1	.444444	$0x, 0y$	$3x, 1y$	$7x, 2y$
7	9	2				
			←			
3	7	4	.437500	$0x, 0y$	$3x, 4y$	$7x, 9y$
7	16	9				
			←			
3	10	7	.434783	$0x, 0y$	$3x, 7y$	$7x, 16y$
7	23	16				
			→			
10	17	7	.435897	$0x, 0y$	$10x, 7y$	$23x, 16y$
23	39	16				
			→			
17	24	7	.436364	$0x, 0y$	$17x, 7y$	$39x, 16y$
39	55	16				
			→			
24	31	7	.436620	$0x, 0y$	$24x, 7y$	$55x, 16y$
55	71	16				
			←			
24	55	31	.436508	$0x, 0y$	$24x, 31y$	$55x, 71y$
55	126	71				
			←			
24	79	55	.436464	$0x, 0y$	$24x, 55y$	$55x, 126y$
55	181	126				
			←			
24	103	79	.436441	$0x, 0y$	$24x, 79y$	$55x, 181y$
55	236	181				
			←			
24	127	103	.436426	$0x, 0y$	$24x, 103y$	$55x, 236y$
55	291	236				
			←			
24	151	127	.436416	$0x, 0y$	$24x, 127y$	$55x, 291y$
55	346	291				
			←			
			etc.			

Meta-Mavila Fifth

.563614294604

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
b	d	f		$0x, 0y$	a, n, e, y	b, m, f, y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	→			
1	2/3	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1	←			
1	3/5	2/3	.600000	$0x, 0y$	$1x, 2y$	$2x, 3y$
2	5	3	←			
1	4/7	3/5	.571429	$0x, 0y$	$1x, 3y$	$2x, 5y$
2	7	5	←			
1	5/9	4/7	.555556	$0x, 0y$	$1x, 4y$	$2x, 7y$
2	9	7	→			
5	9/16	4/7	.562500	$0x, 0y$	$5x, 4y$	$9x, 7y$
9	16	7	→			
9	13/23	4/7	.565217	$0x, 0y$	$9x, 4y$	$16x, 7y$
16	23	7	←			
9	22/39	13/23	.564103	$0x, 0y$	$9x, 13y$	$16x, 23y$
16	39	23	←			
9	31/55	22/39	.563636	$0x, 0y$	$9x, 22y$	$16x, 39y$
16	55	39	←			
9	40/71	31/55	.563380	$0x, 0y$	$9x, 31y$	$16x, 55y$
16	71	55	→			
40	71/126	31/55	.563492	$0x, 0y$	$40x, 31y$	$71x, 55y$
71	126	55	→			
71	102/181	31/55	.563536	$0x, 0y$	$71x, 31y$	$126x, 55y$
126	181	55	→			
102	133/236	31/55	.563559	$0x, 0y$	$102x, 31y$	$181x, 55y$
181	236	55	→			
133	164/291	31/55	.563574	$0x, 0y$	$133x, 31y$	$236x, 55y$
236	291	55	→			
164	195/346	31/55	.563584	$0x, 0y$	$164x, 31y$	$291x, 55y$
291	346	55	→			
	etc.		→			

2.118

$$\frac{2}{\sqrt[6]{3}} \sqrt[6]{\frac{64}{3}}$$

.735839583213

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f	d		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		→			
1	2	1	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1		→			
2	3	1	1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
3	4	1		←			
2	5	3	4	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$
3	7	4		→			
5	8	3	4	.727273	$0x, 0y$	$5x, 3y$	$7x, 4y$
7	11	4		→			
8	11	3	4	.733333	$0x, 0y$	$8x, 3y$	$11x, 4y$
11	15	4		→			
11	14	3	4	.736842	$0x, 0y$	$11x, 3y$	$15x, 4y$
15	19	4		←			
11	25	14	19	.735294	$0x, 0y$	$11x, 14y$	$15x, 19y$
15	34	19		→			
25	39	14	19	.735849	$0x, 0y$	$25x, 14y$	$34x, 19y$
34	53	19		←			
25	64	39	53	.735632	$0x, 0y$	$25x, 39y$	$34x, 53y$
34	87	53		→			
64	103	39	53	.735714	$0x, 0y$	$64x, 39y$	$87x, 53y$
87	140	53		→			
103	142	39	53	.735751	$0x, 0y$	$103x, 39y$	$140x, 53y$
140	193	53		→			
142	181	39	53	.735772	$0x, 0y$	$142x, 39y$	$193x, 53y$
193	246	53		→			
181	220	39	53	.735786	$0x, 0y$	$181x, 39y$	$246x, 53y$
246	299	53		→			
220	259	39	53	.735795	$0x, 0y$	$220x, 39y$	$299x, 53y$
299	352	53		→			

6x41

Meta-Tanaka/Hansonian minorThird

How? did I do this?

.264291324417...

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
b	d	f		$0n, 0y$	a_n, e_y	b_n, f_y
0	1	1	1.000000	$0n, 0y$	$0n, 1y$	$1n, 0y$
1	1	0	←			
0	1/2	1	.500000	$0n, 0y$	$0n, 1y$	$1n, 1y$
1	2	1	←			
0	1/3	1	.333333	$0n, 0y$	$0n, 1y$	$1n, 2y$
1	3	2	←			
0	1/4	1	.250000	$0n, 0y$	$0n, 1y$	$1n, 3y$
1	4	3	→			
1	2/7	1	.285714	$0n, 0y$	$1n, 1y$	$4n, 3y$
4	7	3	←			
1	3/11	2	.272727	$0n, 0y$	$1n, 2y$	$4n, 7y$
4	11	7	←			
1	4/15	3	.266667	$0n, 0y$	$1n, 3y$	$4n, 11y$
4	15	11	←			
1	5/19	4	.263158	$0n, 0y$	$1n, 4y$	$4n, 15y$
4	19	15	→			
5	9/34	4	.264706	$0n, 0y$	$5n, 4y$	$19n, 15y$
19	34	15	←			
5	14/53	9	.264151	$0n, 0y$	$5n, 9y$	$19n, 34y$
19	53	34	→			
14	23/87	9	.264368	$0n, 0y$	$14n, 9y$	$53n, 34y$
53	87	34	←			
14	37/140	23	.264286	$0n, 0y$	$14n, 23y$	$53n, 87y$
53	140	87	→			
37	60/227	23	.264317	$0n, 0y$	$37n, 23y$	$140n, 87y$
140	227	87	←			
37	97/367	60	.264305	$0n, 0y$	$37n, 60y$	$140n, 227y$
140	367	227	←			
37	134/507	97	.264300	$0n, 0y$	$37n, 97y$	$140n, 367y$
140	507	367	←			
37	171/647	134	.264297	$0n, 0y$	$37n, 134y$	$140n, 507y$
140	647	507	←			
		etc.	←			

Jim Davis

Meta-Tanaka/Hansonian Major Sixth

.735708675583

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$	$a'x, e'y$	$5x, fy$
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	→			
1	2/3	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1	→			
2	3/4	1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
3	4	1	←			
2	5/7	3/4	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$
3	7	4	→			
5	8/11	3/4	.727273	$0x, 0y$	$5x, 3y$	$7x, 4y$
7	11	4	→			
8	11/15	3/4	.733333	$0x, 0y$	$8x, 3y$	$11x, 4y$
11	15	4	→			
11	14/19	3/4	.736842	$0x, 0y$	$11x, 3y$	$15x, 4y$
15	19	4	←			
11	25/34	14/19	.735294	$0x, 0y$	$11x, 14y$	$15x, 19y$
15	34	19	→			
25	39/53	14/19	.735849	$0x, 0y$	$25x, 14y$	$34x, 19y$
34	53	19	←			
25	64/87	39/53	.735632	$0x, 0y$	$25x, 39y$	$34x, 53y$
34	87	53	→			
64	103/140	39/53	.735714	$0x, 0y$	$64x, 39y$	$87x, 53y$
87	140	53	←			
64	167/227	103/140	.735683	$0x, 0y$	$64x, 103y$	$87x, 140y$
87	227	140	→			
167	270/367	103/140	.735695	$0x, 0y$	$167x, 103y$	$227x, 140y$
227	367	140	→			
270	373/507	103/140	.735700	$0x, 0y$	$270x, 103y$	$367x, 140y$
367	507	140	→			
373	476/647	103/140	.735703	$0x, 0y$	$373x, 103y$	$507x, 140y$
507	647	140	→			

13².3

Fibonacci, 1.618033 98875...

→ \log_2 .694 241 913 631...

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y	
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$	
			←				
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$	
			→				
1/2	2/3	1/1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$	
			→				
2/3	3/4	1/1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$	
			←				
2/3	5/7	3/4	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$	
			←				
2/3	7/10	5/7	.700000	$0x, 0y$	$2x, 5y$	$3x, 7y$	
			←				
2/3	9/13	7/10	.692308	$0x, 0y$	$2x, 7y$	$3x, 10y$	
			→				
9/13	16/23	7/10	.695652	$0x, 0y$	$9x, 7y$	$13x, 10y$	
			←				
9/13	25/36	16/23	.694444	$0x, 0y$	$9x, 16y$	$13x, 23$	
			←				
7.7	9/13	34/49	25/36	.693878	$0x, 0y$	$9x, 25y$	$13x, 36y$
			→				
17.5	34/49	59/85	25/36	.694118	$0x, 0y$	$34x, 25y$	$49x, 36y$
			→				
112 ✓	59/85	84/121	25/36	.694215	$0x, 0y$	$59x, 25y$	$85x, 36y$
			→				
	84/121	109/157	25/36	.694268	$0x, 0y$	$84x, 25y$	$121x, 36y$
			←				
	84/121	193/278	109/157	.694245	$0x, 0y$	$84x, 109y$	$121x, 157y$
			←				
7.19.3	84/121	277/399	193/278	.694236	$0x, 0y$	$8x, 193y$	$121x, 278y$
			→				
	277/399	470/677	193/278	.694239	$0x, 0y$	$277x, 193y$	$399x, 278y$
		etc.	→				

Fibonacci, $2/1.618... = 1.236...$

$\text{Log}_2 = \underline{.305758086369}$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f	$\frac{c}{d}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	1	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1	1	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		→			
1	2	1	.285714		$0x, 0y$	$1x, 1y$	$4x, 3y$
4	7	3		→			
2	3	1	.300000		$0x, 0y$	$2x, 1y$	$7x, 3y$
7	10	3		→			
3	4	1	.307692		$0x, 0y$	$3x, 1y$	$10x, 3y$
10	13	3		←			
3	7	4	.304348		$0x, 0y$	$3x, 4y$	$10x, 13y$
10	23	13		→			
7	11	4	.305556		$0x, 0y$	$7x, 4y$	$23x, 13y$
23	36	13		→			
11	15	4	.306122		$0x, 0y$	$11x, 4y$	$36x, 13y$
36	49	13		←			
11	26	15	.305882		$0x, 0y$	$11x, 15y$	$36x, 49y$
36	85	49		←			
11	37	26	.305785		$0x, 0y$	$11x, 26y$	$36x, 85y$
36	121	85		←			
11	48	37	.305732		$0x, 0y$	$11x, 37y$	$36x, 121y$
36	157	121		→			
48	85	37	.305755		$0x, 0y$	$48x, 37y$	$157x, 121y$
157	278	121		→			
85	122	37	.305764		$0x, 0y$	$85x, 37y$	$278x, 121y$
278	399	121		←			
85	207	122	.305761		$0x, 0y$	$85x, 122y$	$278x, 399y$
278	677	399		←			
etc.				←			

Meta-Pèlog Fourth

$2/1.465571 = 1.364656 \dots$

$\rightarrow \log_2 = .448536910252 \dots$

DIOPHANTOS
ΔΙΟΦΑΝΤΟΣ

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
b	d	f		$0x, 0y$	ax, ey	bx, fy
0	1	0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	←			
0	1	2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2	→			
1	3	2	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
2	5	2	→			
2	5	2	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
3	7	2	→			
3	7	2	.444444	$0x, 0y$	$3x, 1y$	$7x, 2y$
4	9	2	→			
4	9	2	.454545	$0x, 0y$	$4x, 1y$	$9x, 2y$
4	9	5	←			
4	9	5	.450000	$0x, 0y$	$4x, 5y$	$9x, 11y$
4	9	9	←			
4	9	9	.448276	$0x, 0y$	$4x, 9y$	$9x, 20y$
13	29	9	→			
13	29	9	.448980	$0x, 0y$	$13x, 9y$	$29x, 20y$
13	29	22	←			
13	29	22	.448718	$0x, 0y$	$13x, 22y$	$29x, 49y$
13	29	35	←			
13	29	35	.448598	$0x, 0y$	$13x, 35y$	$29x, 78y$
13	29	48	←			
13	29	48	.448529	$0x, 0y$	$13x, 48y$	$29x, 107y$
61	136	48	→			
61	136	48	.448560	$0x, 0y$	$61x, 48y$	$136x, 107y$
61	136	109	←			
61	136	109	.448549	$0x, 0y$	$61x, 109y$	$136x, 243y$
61	136	170	←			
61	136	170	.448544	$0x, 0y$	$61x, 170y$	$136x, 379y$
			etc.			

✓ Analogous to Carillo's 96

Meta Pèlog, 1.46557123188 ...

→ Log_2 .551463089748 ...

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$	a_n, e_y	b_n, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1/2	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		→			
1/2	2/3	1	.666667		$0x, 0y$	$1x, 1y$	$2x, 1y$
1	3	2		←			
1/2	3/5	2/3	.600000		$0x, 0y$	$1x, 2y$	$2x, 3y$
1	4	3		←			
1/2	4/7	3/5	.571429		$0x, 0y$	$1x, 3y$	$2x, 5y$
1	5	4		←			
1/2	5/9	4/7	.555556		$0x, 0y$	$1x, 4y$	$2x, 7y$
1	6	5		←			
1/2	6/11	5/9	.545455		$0x, 0y$	$1x, 5y$	$2x, 9y$
6	11	5		→			
11	20	9	.550000		$0x, 0y$	$6x, 5y$	$11x, 9y$
11	16	5		→			
20	29	9	.551724		$0x, 0y$	$11x, 5y$	$20x, 9y$
11	27	16		←			
20	49	29	.551020		$0x, 0y$	$11x, 16y$	$20x, 29y$
27	43	16		→			
49	78	29	.551282		$0x, 0y$	$27x, 16y$	$49x, 29y$
43	59	16		→			
78	107	29	.551402		$0x, 0y$	$43x, 16y$	$78x, 29y$
59	75	16		→			
107	136	29	.551471		$0x, 0y$	$59x, 16y$	$107x, 29y$
59	134	75		←			
107	243	136	.551440		$0x, 0y$	$59x, 75y$	$107x, 136y$
134	209	75		→			
243	379	136	.551451		$0x, 0y$	$134x, 75y$	$243x, 136y$
209	284	75		→			
379	515	136	.551456		$0x, 0y$	$209x, 75y$	$379x, 136y$
209	651	etc.		→			

8x17

9x27

3x7x31

23Feb00.εw

Meta-Slendero, 1.32471795725... #3 & #6
 → $\log_2 .405685231382...$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave
				$0x, 0y$ a, x, e, y b, x, f, y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0	←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1	←	
0	1/3	1/2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
1	3	2	→	
1	2/5	1/2	.400000	$0x, 0y$ $1x, 1y$ $3x, 2y$
2	5	2	→	
2	3/7	1/2	.428571	$0x, 0y$ $2x, 1y$ $5x, 2y$
5	7	2	←	
2	5/12	3/7	.416667	$0x, 0y$ $2x, 3y$ $5x, 7y$ ✓
5	12	7	←	
2	7/17	5/12	.411765	$0x, 0y$ $2x, 5y$ $5x, 12y$ ✓
5	17	12	←	
2	9/22	7/17	.409091	$0x, 0y$ $2x, 7y$ $5x, 17y$ ✓
5	22	17	←	
2	11/27	9/22	.407407	$0x, 0y$ $2x, 9y$ $5x, 22y$ ✓
5	27	22	←	
2	13/32	11/27	.406250	$0x, 0y$ $2x, 11y$ $5x, 27y$ ✓
5	32	27	←	
2	15/37	13/32	.405405	$0x, 0y$ $2x, 13y$ $5x, 32y$ ✓
5	37	32	→	
3.23	15/37	28/69	.405797	$0x, 0y$ $15x, 13y$ $37x, 32y$
	37	69	←	
2.53	15/37	43/69	.405660	$0x, 0y$ $15x, 28y$ $37x, 69y$ ✓
	37	106	→	
5 ² .7	43/106	71/175	.405714	$0x, 0y$ $43x, 28y$ $106x, 69y$
	106	175	←	
	43/106	114/175	.405694	$0x, 0y$ $43x, 71y$ $106x, 75y$
	106	281	←	
43.3 ²	43/106	157/387	.4056847	$0x, 0y$ $43x, 114y$ $106x, 281y$
	106	387	→	
	etc.			

Meta-Slendro Fifth, 2/1.32471795725

→ $\text{Log}_2 .594314768618\dots$

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
b	d	f		$0x, 0y$	a^x, e^y	b^x, f^y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0	←			
0	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1	→			
1/2	2/3	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1	←			
1/2	3/5	2/3	.600000	$0x, 0y$	$1x, 2y$	$2x, 3y$
2	5	3	←			
1/2	4/7	3/5	.571429	$0x, 0y$	$1x, 3y$	$2x, 5y$
2	7	5	→			
4/7	7/12	3/5	.583333	$0x, 0y$	$4x, 3y$	$7x, 5y$
7	12	5	→			
7/12	10/17	3/5	.588235	$0x, 0y$	$7x, 3y$	$12x, 5y$
12	17	5	→			
10/17	13/22	3/5	.590909	$0x, 0y$	$10x, 3y$	$17x, 5y$
22	22	5	→			
13/22	16/27	3/5	.592593	$0x, 0y$	$13x, 3y$	$22x, 5y$
27	27	5	→			
16/27	19/32	3/5	.593750	$0x, 0y$	$16x, 3y$	$27x, 5y$
32	32	5	→			
19/32	22/37	3/5	.594595	$0x, 0y$	$19x, 3y$	$32x, 5y$
37	37	5	←			
19/37	41/69	22/37	.594203	$0x, 0y$	$19x, 22y$	$32x, 37y$
69	69	37	→			
41/69	63/106	22/37	.594340	$0x, 0y$	$41x, 22y$	$69x, 37y$
106	106	37	←			
41/106	104/175	63/106	.594286	$0x, 0y$	$41x, 63y$	$69x, 106y$
175	175	106	→			
104/175	167/281	63/106	.594306	$0x, 0y$	$104x, 63y$	$175x, 106y$
281	281	106	→			
167/281	230/387	63/106	.5943152	$0x, 0y$	$167x, 63y$	$281x, 106y$
387	387	106	←			
etc.(up to 1024)					etc.	

$$G = (16 + 16G)^{(1/9)} = 1.50710537587$$

$$\text{Log}_2 \underline{.591780292802}$$

	a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave	
	b	d	f			$0x, 0y$	a_n, e_y	b_n, f_y	
	0	1	0	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$	
					←				
	0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$	
					→				
	1	2	1	.666667		$0x, 0y$	$1x, 1y$	$2x, 1y$	
					←				
	1	2	3	.600000		$0x, 0y$	$1x, 2y$	$2x, 3y$	✓
					←				
	1	2	4	.571429		$0x, 0y$	$1x, 3y$	$2x, 5y$	✓
					→				
	4	7	3	.583333		$0x, 0y$	$4x, 3y$	$7x, 5y$	
					→				
	7	12	3	.588235		$0x, 0y$	$7x, 3y$	$12x, 5y$	
					→				
	10	17	3	.590909		$0x, 0y$	$10x, 3y$	$17x, 5y$	
					→				
SJT →	13	22	3	.592593		$0x, 0y$	$13x, 3y$	$22x, 5y$	
					←				
7x7	13	22	16	.591837		$0x, 0y$	$13x, 16y$	$22x, 27y$	✓
					←				
	13	22	29	.591549		$0x, 0y$	$13x, 29y$	$22x, 49y$	✓
					→				
12x10	42	71	29	.591667		$0x, 0y$	$42x, 29y$	$71x, 49y$	
					→				
13x13	71	120	29	.591716		$0x, 0y$	$71x, 29y$	$120x, 49y$	
					→				
	100	169	29	.591743		$0x, 0y$	$100x, 29y$	$169x, 49y$	
					→				
	129	218	29	.591760		$0x, 0y$	$129x, 29y$	$218x, 49y$	
					→				
	158	267	29	.591760		$0x, 0y$	$158x, 29y$	$267x, 49y$	
					→				
	158	267	316	.591760		$0x, 0y$	$158x, 29y$	$267x, 49y$	
					→				
next is 216/365!					→				

$$2/1.507105... = 1.32704722047...$$

$$\rightarrow \text{Log}_2 .408219707198...$$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave			
b	d	f		$0x, 0y$	a_x, e_y	b_x, f_y	
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$	✓
			←				
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$	✓
			←				
0	1	1	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$	✓
			→				
1	2	1	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$	
			→				
2	3	1	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$	
			←				
2	5	3	.416667	$0x, 0y$	$2x, 3y$	$5x, 7y$	✓
			←				
2	7	5	.411765	$0x, 0y$	$2x, 5y$	$5x, 12y$	✓ ← note gen position
			←				
2	9	7	.409091	$0x, 0y$	$2x, 7y$	$5x, 17y$	✓
			←				
2	11	9	.407407	$0x, 0y$	$2x, 9y$	$5x, 22y$	✓
			→				
11	20	9	.408163	$0x, 0y$	$11x, 9y$	$27x, 22y$	
			→				
20	29	9	.408451	$0x, 0y$	$20x, 9y$	$49x, 22y$	
			←				
20	49	29	.408333	$0x, 0y$	$20x, 29y$	$49x, 71y$	✓
			←				
20	69	49	.408284	$0x, 0y$	$20x, 49y$	$49x, 120y$	✓ ←
			←				
20	89	69	.408257	$0x, 0y$	$20x, 69y$	$49x, 169y$	
			←				
20	109	89	.408240	$0x, 0y$	$20x, 89y$	$49x, 218y$	
			←				
20	129	109	.408228	$0x, 0y$	$20x, 109y$	$49x, 267y$	
			←				
20	149	129		$0x, 0y$	$20x, 129y$	$49x, 316y$	
49	365	316					

$$G = (1 + 2G)^{1/2} = 2.41421356237\dots$$

$$\div 2 = 1.20710678118\dots$$

$$\rightarrow \text{Log}_2 = .271553303156\dots$$

$(\sqrt{2} + 1) \div 2$
Try the whole series

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f			$0x, 0y$	$a'x, e'y$	$b'x, f'y$
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				→			
1	2	1	.285714		$0x, 0y$	$1x, 1y$	$4x, 3y$
				←			
1	3	2	.272727		$0x, 0y$	$1x, 2y$	$4x, 7y$
				←			
1	4	3	.266667		$0x, 0y$	$1x, 3y$	$4x, 11y$
				→			
4	7	3	.269231		$0x, 0y$	$4x, 3y$	$15x, 11y$
				→			
7	10	3	.270270		$0x, 0y$	$7x, 3y$	$26x, 11y$
				→			
10	13	3	.270833		$0x, 0y$	$10x, 3y$	$37x, 11y$
				→			
13	16	3	.271186		$0x, 0y$	$13x, 3y$	$48x, 11y$
				→			
16	19	3	.271429		$0x, 0y$	$16x, 3y$	$59x, 11y$
				→			
19	22	3	.271605		$0x, 0y$	$19x, 3y$	$70x, 11y$
				←			
19	41	22	.271523		$0x, 0y$	$19x, 22y$	$70x, 81y$
				→			
41	63	22	.2715517		$0x, 0y$	$41x, 22y$	$151x, 81y$
				→			
63	85	22	.2715655		$0x, 0y$	$63x, 22y$	$232x, 81y$
				←			

29x8

$$4 \div (-\sqrt{2} + 1) = 1.65685424949\dots$$

$$4 \div (-\sqrt{2} + 1)$$

Log 2 .728446696844...

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave
				$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			←	
2	5	3	.714286	$0x, 0y$ $2x, 3y$ $3x, 4y$
			→	
5	8	3	.727273	$0x, 0y$ $5x, 3y$ $7x, 4y$
			→	
8	11	3	.733333	$0x, 0y$ $8x, 3y$ $11x, 4y$
			←	
8	19	11	.730769	$0x, 0y$ $8x, 11y$ $11x, 15y$
			←	
8	27	19	.729730	$0x, 0y$ $8x, 19y$ $11x, 26y$ ✓
			←	
8	35	27	.729167	$0x, 0y$ $8x, 27y$ $11x, 37y$
			←	
8	43	35	.728814	$0x, 0y$ $8x, 35y$ $11x, 48y$
			←	
8	51	43	.728571	$0x, 0y$ $8x, 43y$ $11x, 59y$
			←	
8	59	51	.728395	$0x, 0y$ $8x, 51y$ $11x, 70y$
			→	
59	110	51	.728477	$0x, 0y$ $59x, 51y$ $81x, 70y$
			←	
59	169	110	.7284483	$0x, 0y$ $59x, 110y$ $81x, 151y$
			←	
59	228	169	.7284345	$0x, 0y$ $59x, 169y$ $81x, 232y$

$$G = (2+G)^{(1/3)} = 1.52137970680\dots$$

→ $\text{Log}_2 .605380266640$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$	Root Generator Octave
$0x, 0y$	ax, ey	bx, fy		
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1/2	2/3	1/1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			←	
1/2	3/5	2/3	.600000	$0x, 0y$ $1x, 2y$ $2x, 3y$ ✓
			→	
3/5	5/8	2/3	.625000	$0x, 0y$ $3x, 2y$ $5x, 3y$
			←	
3/5	8/13	5/8	.615385	$0x, 0y$ $3x, 5y$ $5x, 8y$
			←	
3/5	11/18	8/13	.611111	$0x, 0y$ $3x, 8y$ $5x, 13y$ ✓
			←	
3/5	14/23	11/18	.608696	$0x, 0y$ $3x, 11y$ $5x, 18y$
			←	
3/5	17/28	14/23	.607143	$0x, 0y$ $3x, 14y$ $5x, 23y$
			←	
3/5	20/33	17/28	.606061	$0x, 0y$ $3x, 17y$ $5x, 28y$
			←	
3/5	23/38	20/33	.605263	$0x, 0y$ $3x, 20y$ $5x, 33y$
			→	
23/38	43/71	20/33	.605634	$0x, 0y$ $23x, 20y$ $38x, 33y$
			←	
23/38	66/109	43/71	.605505	$0x, 0y$ $23x, 43y$ $38x, 71y$
			←	
23/38	89/147	66/109	.605442	$0x, 0y$ $23x, 66y$ $38x, 109y$
			←	
23/38	112/185	89/147	.605405	$0x, 0y$ $23x, 89y$ $38x, 147y$
			←	
23/38	135/223	112/185	.6053812	$0x, 0y$ $23x, 112y$ $38x, 185y$
			←	

2.19

41, 53, 94, 147

$$2 \div 1.52137970680 = 1.31459621228\dots$$

$$G = (2+G)^{1/3}$$

Silendro LLSLS

$$\rightarrow \text{Log}_2 .394619733360\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0		←	
0	1	1	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1		←	
0	1	1	.333333		$0x, 0y$ $0x, 1y$ $1x, 2y$ ✓
1	3	2		→	
1	2	1	.400000		$0x, 0y$ $1x, 1y$ $3x, 2y$
3	5	2		←	
1	3	2	.375000		$0x, 0y$ $1x, 2y$ $3x, 5y$ ✓
3	8	5		→	
3	5	2	.384615		$0x, 0y$ $3x, 2y$ $8x, 5y$
8	13	5		→	
5	7	2	.388889		$0x, 0y$ $5x, 2y$ $13x, 5y$
13	18	5		→	
7	9	2	.391304		$0x, 0y$ $7x, 2y$ $18x, 5y$
18	23	5		→	
9	11	2	.392857		$0x, 0y$ $9x, 2y$ $23x, 5y$
23	28	5		→	
11	13	2	.393939		$0x, 0y$ $11x, 2y$ $28x, 5y$
28	33	5		→	
13	15	2	.394737		$0x, 0y$ $13x, 2y$ $33x, 5y$
33	38	5		←	
13	28	15	.394366		$0x, 0y$ $13x, 15y$ $33x, 38y$ ✓
33	71	38		→	
28	43	15	.394495		$0x, 0y$ $28x, 15y$ $71x, 38y$
71	109	38		→	
43	58	15	.394558		$0x, 0y$ $43x, 15y$ $109x, 38y$ ✓
109	147	38		→	
58	73	15	.394595		$0x, 0y$ $58x, 15y$ $147x, 38y$
147	185	38		→	
73	88	15	.3946188		$0x, 0y$ $73x, 15y$ $185x, 38y$
185	223	38		→	

$$G = (128 + 2G^7)^{(1/10)} = 1.70969994699\dots$$

done twice

→ $\log_2 .773743153781\dots$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			←	
3	7	4	.777778	$0x, 0y$ $3x, 4y$ $4x, 5y$
			←	
3	10	7	.769231	$0x, 0y$ $3x, 7y$ $4x, 9y$
			→	
10	17	7	.772727	$0x, 0y$ $10x, 7y$ $13x, 9y$
			→	
17	24	7	.774194	$0x, 0y$ $17x, 7y$ $22x, 9y$
			←	
17	41	24	.773585	$0x, 0y$ $17x, 24y$ $22x, 31y$
			→	
41	65	24	.773810	$0x, 0y$ $41x, 24y$ $53x, 31y$
			←	
41	106	65	.773723	$0x, 0y$ $41x, 65y$ $53x, 84y$
			→	
106	171	65	.773756	$0x, 0y$ $106x, 65y$ $137x, 84y$
			←	
106	277	171	.773743017	$0x, 0y$ $106x, 171y$ $137x, 221y$
			→	
277	448	171	.773748	$0x, 0y$ $277x, 171y$ $358x, 221y$
			←	
277	725	448	.773746	$0x, 0y$ $277x, 448y$ $358x, 579y$
			←	
etc			56 places	

137 is good

!

$$2 / 1.7096999... = 1.16979590689...$$

done twice

$$\text{Log}_2 .226256846219...$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$		$0x, 0y$	a_n, e_y	b_n, f_y
0	1	0	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				←			
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
				→			
1	2	1	.222222		$0x, 0y$	$1x, 1y$	$5x, 4y$
				→			
2	3	1	.230769		$0x, 0y$	$2x, 1y$	$9x, 4y$
				←			
2	5	3	.227273		$0x, 0y$	$2x, 3y$	$9x, 13y$
				←			
2	7	5	.225806		$0x, 0y$	$2x, 5y$	$9x, 22y$
				→			
7	12	5	.226415		$0x, 0y$	$7x, 5y$	$31x, 22y$
				←			
7	19	12	.226190		$0x, 0y$	$7x, 12y$	$31x, 53y$
				→			
19	31	12	.226277		$0x, 0y$	$19x, 12y$	$84x, 53y$
				←			
19	50	31	.226244		$0x, 0y$	$19x, 31y$	$84x, 137y$
				→			
50	81	31	.22625698		$0x, 0y$	$50x, 31y$	$221x, 137y$
				←			
50	131	81	.226252		$0x, 0y$	$50x, 81y$	$221x, 358y$
				→			
131	212	81	.226254		$0x, 0y$	$131x, 81y$	$579x, 358y$
				→			
etc...							

$$G = (128 + 2G^7)^{1/10} = 1.70969994699 \dots$$

→ $\text{Log}_2 .773743153781 \dots$

#29
variation

7.12

!

13.17

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			←	
3	7	4	.777778	$0x, 0y$ $3x, 4y$ $4x, 5y$
			←	
3	10	7	.769231	$0x, 0y$ $3x, 7y$ $4x, 9y$
			→	
10	17	7	.772727	$0x, 0y$ $10x, 7y$ $13x, 9y$
			→	
17	24	7	.774194	$0x, 0y$ $17x, 7y$ $22x, 9y$
			←	
17	41	24	.773585	$0x, 0y$ $17x, 24y$ $22x, 31y$
			→	
41	65	24	.773810	$0x, 0y$ $41x, 24y$ $53x, 31y$
			←	
41	106	65	.773723	$0x, 0y$ $41x, 65y$ $53x, 84y$
			→	
106	171	65	.773756	$0x, 0y$ $106x, 65y$ $137x, 84y$
			←	
106	277	171	.773743017	$0x, 0y$ $106x, 171y$ $137x, 221y$
			→	
277	448	171	.773748	$0x, 0y$ $277x, 171y$ $358x, 221y$
			←	
277	725	448	.773746	$0x, 0y$ $277x, 448y$ $358x, 579y$
			←	
277	937	579		

(56 places)

28Feb00.εw

$$2 \div 1.70969994699 \dots = 1.16979590689 \dots$$

$$\rightarrow \log_2 .226256846219 \dots$$

$$G = (128 + 2G^7)^{1/10} \text{ Compl.}$$

a	c	e	c	dec.	Root	Generator	Octave
b	d	f	d		$0x, 0y$	a_n, e_y	b_n, f_y
0	1	0	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
			←				
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
			←				
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
			←				
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
			←				
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
			→				
1	5	1	.222222		$0x, 0y$	$1x, 1y$	$5x, 4y$
			→				
2	9	1	.230769		$0x, 0y$	$2x, 1y$	$9x, 4y$
			←				
2	9	3	.227273		$0x, 0y$	$2x, 3y$	$9x, 13y$
			←				
2	9	5	.225806		$0x, 0y$	$2x, 5y$	$9x, 22y$
			→				
7	31	5	.226415		$0x, 0y$	$7x, 5y$	$31x, 22$
			←				
7	31	12	.226190		$0x, 0y$	$7x, 12y$	$31x, 53y$
7.12			→				
19	84	12	.226277		$0x, 0y$	$19x, 12y$	$84x, 53y$
v.g.			←				
19	84	31	.226244		$0x, 0y$	$19x, 31y$	$84x, 137y$
13.17			→				
50	221	31	.226256983		$0x, 0y$	$50x, 31y$	$221x, 137y$
			←				
50	221	81	.226252		$0x, 0y$	$50x, 81y$	$221x, 358y$
			→				
131	579	81	.226254		$0x, 0y$	$131x, 81y$	$579x, 358y$
			→				

✓

✓ note gen!

$$G = (8 + G^5)^{1/6} = 1.65139032696\dots$$

→ Log_2 .723681159751...

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0		←
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1		→
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
2	3	1		→
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
3	4	1		←
2	5/7	3	.714286	$0x, 0y$ $2x, 3y$ $3x, 4y$ ✓
3	5	4		→
5	8/11	3	.727273	$0x, 0y$ $5x, 3y$ $7x, 4y$
7	11	4		←
5	13/18	8	.722222	$0x, 0y$ $5x, 8y$ $7x, 11y$ ✓
7	18	11		→
13	21/29	8	.724138	$0x, 0y$ $13x, 8y$ $18x, 11y$
18	29	11		←
13	34/47	21	.723404	$0x, 0y$ $13x, 21y$ $18x, 29y$ ✓
18	47	29		→
34	55/76	21	.723684	$0x, 0y$ $34x, 21y$ $47x, 29y$
47	76	29		←
34	89/123	55	.723577	$0x, 0y$ $34x, 55y$ $47x, 76y$ ✓
47	123	76		→
89	144/199	55	.723618	$0x, 0y$ $89x, 55y$ $123x, 76y$
123	199	76		→
144	199/275	55	.723636	$0x, 0y$ $144x, 55y$ $199x, 76y$
199	275	76		→
199	254/351	55	.723647	$0x, 0y$ $199x, 55y$ $275x, 76y$
275	351	76		→
254	309/427	55	.723653	$0x, 0y$ $254x, 55y$ $351x, 76y$
351	427	76		→
309	364/503	55	.723658	$0x, 0y$ $309x, 55y$ $427x, 76y$
427	503	76		→

56 places

29Feb00.ew

$$2 \div 1.65139032696 \dots = 1.21110071153 \dots$$

$$\text{Comp. to } G = (8 + G^5)^{(1/6)}$$

$$\rightarrow \text{Log}_2 .276318840249 \dots$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f			$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	1	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1	1	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		→			
1	2	1	.285714		$0x, 0y$	$1x, 1y$	$4x, 3y$
4	7	3		←			
1	3	2	.272727		$0x, 0y$	$1x, 2y$	$4x, 7y$
4	11	7		→			
3	5	2	.277778		$0x, 0y$	$3x, 2y$	$11x, 7y$
11	18	7		←			
3	8	5	.275862		$0x, 0y$	$3x, 5y$	$11x, 18y$
11	29	18		→			
8	13	5	.276596		$0x, 0y$	$8x, 5y$	$29x, 18y$
29	47	18		←			
8	21	13	.276316		$0x, 0y$	$8x, 13y$	$29x, 47y$
29	76	47		→			
21	34	13	.276423		$0x, 0y$	$21x, 13y$	$76x, 47y$
76	123	47		←			
21	55	34	.276382		$0x, 0y$	$21x, 34y$	$76x, 123y$
76	199	123		←			
21	76	55	.276364		$0x, 0y$	$21x, 55y$	$76x, 199y$
76	275	199		←			
21	97	76	.276353		$0x, 0y$	$21x, 76y$	$76x, 275y$
76	351	275		←			
21	118	97	.276347		$0x, 0y$	$21x, 97y$	$76x, 351y$
76	427	351		←			
21	139	118	.276342		$0x, 0y$	$21x, 118y$	$76x, 427y$
76	503	427		←			

$$(\sqrt{3}+1)/2 = 1.36602540378\dots$$

See Larry Hansons little paper

$$\rightarrow \text{Log}_2 .449984313472\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y
0	1	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	1/2	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	1	1/3	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		→			
1	3	2	2/5	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
2	5	1		→			
2	5	2	3/7	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
3	7	1		→			
3	7	2	4/9	.444444	$0x, 0y$	$3x, 1y$	$7x, 2y$
4	9	1		→			
4	9	2	5/11	.454545	$0x, 0y$	$4x, 1y$	$9x, 2y$
4	9	5		←			
4	9	11	9/20	.450000	$0x, 0y$	$4x, 5y$	$9x, 11y$
4	9	20		←			
4	9	20	13/29	.448275	$0x, 0y$	$4x, 9y$	$9x, 20y$
13	29	9		→			
13	29	20	22/49	.448979	$0x, 0y$	$13x, 9y$	$29x, 20y$
22	49	9		→			
22	49	20	31/69	.449275	$0x, 0y$	$22x, 9y$	$49x, 20y$
31	69	9		→			
31	69	20	40/89	.449438	$0x, 0y$	$31x, 9y$	$69x, 20y$
40	89	9		→			
40	89	20	49/109	.449541	$0x, 0y$	$40x, 9y$	$89x, 20y$
49	109	9		→			
49	109	20	58/129	.449612	$0x, 0y$	$49x, 9y$	$109x, 20y$
58	129	9		→			
58	129	20	67/149	.449664	$0x, 0y$	$58x, 9y$	$129x, 20y$
67	149	9		→			
67	149	20	76/169	.449704	$0x, 0y$	$67x, 9y$	$149x, 20y$
etc				→			

13²

$$4 \div (-\sqrt{3} + 1) = 1.46410161514 \dots$$

comp 1.3660

→ $\log_2 .550015686528 \dots$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator ax, ey	Octave bx, fy
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0	$\frac{1}{2}$	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1	$\frac{2}{3}$	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			←			
1	$\frac{3}{5}$	$\frac{2}{3}$	.600000	$0x, 0y$	$1x, 2y$	$2x, 3y$
			←			
1	$\frac{4}{7}$	$\frac{3}{5}$	.571429	$0x, 0y$	$1x, 3y$	$2x, 5y$
			←			
1	$\frac{5}{9}$	$\frac{4}{7}$	.555556	$0x, 0y$	$1x, 4y$	$2x, 7y$
			←			
1	$\frac{6}{11}$	$\frac{5}{9}$	.545455	$0x, 0y$	$1x, 5y$	$2x, 9y$
			→			
6	$\frac{11}{20}$	$\frac{5}{9}$	.550000	$0x, 0y$	$6x, 5y$	$11x, 9y$
			→			
11	$\frac{16}{29}$	$\frac{5}{9}$	.551724	$0x, 0y$	$11x, 5y$	$20x, 9y$
			←			
11	$\frac{27}{49}$	$\frac{16}{29}$	.551020	$0x, 0y$	$11x, 16y$	$20x, 29y$
			←			
11	$\frac{38}{69}$	$\frac{27}{49}$	.550725	$0x, 0y$	$11x, 27y$	$20x, 49y$
			←			
11	$\frac{49}{89}$	$\frac{38}{69}$	.550562	$0x, 0y$	$11x, 38y$	$20x, 69y$
			←			
11	$\frac{60}{109}$	$\frac{49}{89}$	.550459	$0x, 0y$	$11x, 49y$	$20x, 89y$
			←			
11	$\frac{71}{129}$	$\frac{60}{109}$	.550388	$0x, 0y$	$11x, 60y$	$20x, 109y$
			←			
11	$\frac{82}{149}$	$\frac{71}{129}$	.550336	$0x, 0y$	$11x, 71y$	$20x, 129y$
			←			
11	$\frac{93}{169}$	$\frac{82}{149}$	.550296	$0x, 0y$	$11x, 82y$	$20x, 149y$

$$G = (1 + G^3)^{1/4} = 1.38027756909\dots$$

Meru 4

$$\text{Log}_2 .464958417209\dots$$

	a	c	e		Root	Generator	Octave
	b	d	f	$\frac{c}{d}$ dec.	$0x, 0y$	a_n, e_y	b_n, f_y
	0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
	0	1	2	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
	0	1	3	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
				→			
	1	2	5	.400000	$0x, 0y$	$1x, 1y$	$3x, 2y$
				→			
	2	3	7	.428571	$0x, 0y$	$2x, 1y$	$5x, 2y$
				→			
	3	4	9	.444444	$0x, 0y$	$3x, 1y$	$7x, 2y$
				→			
	4	5	11	.454545	$0x, 0y$	$4x, 1y$	$9x, 2y$
				→			
	5	6	13	.461538	$0x, 0y$	$5x, 1y$	$11x, 2y$
				→			
	6	7	15	.466667	$0x, 0y$	$6x, 1y$	$13x, 2y$
				←			
7.4	6	13	7	.464286	$0x, 0y$	$6x, 7y$	$13x, 15y$
				→			
→ 43	13	20	7	.465116	$0x, 0y$	$13x, 7y$	$28x, 15y$
				←			
	13	33	20	.464789	$0x, 0y$	$13x, 20y$	$28x, 43y$
				→			
19.6	33	53	20	.464912	$0x, 0y$	$33x, 20y$	$71x, 43y$
				→			
	53	73	20	.464968	$0x, 0y$	$53x, 20y$	$114x, 43y$
				←			
	53	126	73	.464945	$0x, 0y$	$53x, 73y$	$114x, 157y$
				→			
	126	199	73	.464953	$0x, 0y$	$126x, 73y$	$271x, 157y$
				→			
	etc						

$$2/G = 2/(1+G^3)^{1/4} = 1.44898391801\dots$$

Compl Meru #4

$\log_2 .535041582791\dots$

a	c	e	c	Root	Generator	Octave
b	d	f	d dec.	$0n, 0y$	a_n, e_y	b_n, f_y
0	1	1	1.000000	$0n, 0y$	$0n, 1y$	$1n, 0y$
			←			
0	1/2	1	.500000	$0n, 0y$	$0n, 1y$	$1n, 1y$
			→			
1	2/3	1	.666667	$0n, 0y$	$1n, 1y$	$2n, 1y$
			←			
1	3/5	2	.600000	$0n, 0y$	$1n, 2y$	$2n, 3y$
			←			
1	4/7	3	.571429	$0n, 0y$	$1n, 3y$	$2n, 5y$
			←			
1	5/9	4	.555556	$0n, 0y$	$1n, 4y$	$2n, 7y$
			←			
1	6/11	5	.545455	$0n, 0y$	$1n, 5y$	$2n, 9y$
			←			
1	7/13	6	.538462	$0n, 0y$	$1n, 6y$	$2n, 11y$
			←			
1	8/15	7	.533333	$0n, 0y$	$1n, 7y$	$2n, 13y$
			→			
8	15/28	7	.535714	$0n, 0y$	$8n, 7y$	$15n, 13y$
			←			
8	23/43	15	.534884	$0n, 0y$	$8n, 15y$	$15n, 28y$
			→			
23	38/71	15	.535211	$0n, 0y$	$23n, 15y$	$43n, 28y$
			←			
23	61/114	38	.535088	$0n, 0y$	$23n, 38y$	$43n, 71y$
			←			
23	84/157	61	.535032	$0n, 0y$	$23n, 61y$	$43n, 114y$
			→			
84	145/271	61	.535055	$0n, 0y$	$84n, 61y$	$157n, 114y$
			←			
84	229/428	145	.535047	$0n, 0y$	$84n, 145y$	$157n, 271y$
			←			

$$G = (1+G)^{1/4} = 1.22074408461\dots$$

$$\rightarrow \log_2 .287760787088\dots$$

Meta-Ptolemy

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave
$0x, 0y$	a, e_y	b, f_y		$0x, 0y$	a, e_y	b, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			←			
0/1	1/3	1/2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
			←			
0/1	1/4	1/3	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$
			→			
1/4	2/7	1/3	.285714	$0x, 0y$	$1x, 1y$	$4x, 3y$
			→			
2/7	3/10	1/3	.300000	$0x, 0y$	$2x, 1y$	$7x, 3y$
			←			
2/7	5/17	3/10	.294118	$0x, 0y$	$2x, 3y$	$7x, 10y$
			←			
2/7	7/24	5/17	.291667	$0x, 0y$	<u>$2x, 5y$</u>	$7x, 17y$
			←			
2/7	9/31	7/24	.290323	$0x, 0y$	$2x, 7y$	$7x, 24y$
			←			
2.19	11/38	9/31	.289474	$0x, 0y$	$2x, 9y$	$7x, 31y$
			←			
5.9	13/45	11/38	.288889	$0x, 0y$	$2x, 11y$	$7x, 38y$
			←			
13.4	15/52	13/45	.288462	$0x, 0y$	$2x, 13y$	$7x, 45y$
			←			
2/7	17/59	15/52	.288136	$0x, 0y$	$2x, 15y$	$7x, 52y$
			←			
2/7	19/66	17/59	.287879	$0x, 0y$	$2x, 17y$	$7x, 59y$
			←			
→	21/73	19/66	.287671	$0x, 0y$	$2x, 19y$	$7x, 66y$
			→			
21/73	40/139	19/66	.287770	$0x, 0y$	$21x, 19y$	$73x, 66y$
			←			

$$2/G = 2/(1+G)^{(1/4)} = 1.63834502679\dots$$

$$\rightarrow \text{Log}_2 \underline{.712239212912\dots}$$

Comp meta-Ptolemy

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave
				$0x, 0y$	a_x, e_y	b_x, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1/2	2/3	1/1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			→			
2/3	3/4	1/1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
			←			
2/3	5/7	3/4	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$
			←			
2/3	7/10	5/7	.700000	$0x, 0y$	<u>$2x, 5y$</u>	$3x, 7y$
			→			
7/10	12/17	5/7	.705882	$0x, 0y$	$7x, 5y$	$10x, 7y$
			→			
12/17	17/24	5/7	.708333	$0x, 0y$	$12x, 5y$	$17x, 7y$
			→			
17/24	22/31	5/7	.709677	$0x, 0y$	$17x, 5y$	$24x, 7y$
			→			
22/31	27/38	5/7	.710526	$0x, 0y$	$22x, 5y$	$31x, 7y$
			→			
27/38	32/45	5/7	.711111	$0x, 0y$	$27x, 5y$	$38x, 7y$
			→			
32/45	37/52	5/7	.711538	$0x, 0y$	$32x, 5y$	$45x, 7y$
			→			
37/52	42/59	5/7	.711864	$0x, 0y$	$37x, 5y$	$52x, 7y$
			→			
42/59	47/66	5/7	.712121	$0x, 0y$	$42x, 5y$	$59x, 7y$
			→			
47/66	52/73	5/7	.712329	$0x, 0y$	$47x, 5y$	$66x, 7y$
			←			
47/66	99/139	52/73	.712230	$0x, 0y$	$47x, 52y$	$66x, 73y$
			→			

2.26

→

$$G = (4 + G^3)^{1/4} = 1.74840288125 \dots \text{ (Meta-s'lendro 2)}$$

$$\log_2 = .806037660702 \dots \text{ (limit)}$$

a	c	e	$\frac{c}{d}$ dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1	2/3	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			→			
2	3/4	1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
			→			
3	4/5	1	.800000	$0x, 0y$	$3x, 1y$	$4x, 1y$
			→			
4	5/6	1	.833333	$0x, 0y$	$4x, 1y$	$5x, 1y$
			←			
4	9/11	5	.818182	$0x, 0y$	$4x, 5y$	$5x, 6y$
			←			
4	13/16	9	.812500	$0x, 0y$	$4x, 9y$	$5x, 11y$
			←			
4	17/21	13	.809524	$0x, 0y$	$4x, 13y$	$5x, 16y$
			←			
4	21/26	17	.807692	$0x, 0y$	$4x, 17y$	$5x, 21y$
			←			
4	25/31	21	.806452	$0x, 0y$	$4x, 21y$	$5x, 26y$
			←			
4	29/36	25	.805556	$0x, 0y$	$4x, 25y$	$5x, 31y$
			→			
29	54/67	25	.805970	$0x, 0y$	$29x, 25y$	$36x, 31y$
			→			
54	79/98	25	.806122	$0x, 0y$	$54x, 25y$	$67x, 31y$
			←			
54	133/165	79	.806061	$0x, 0y$	$54x, 79y$	$67x, 98y$
			←			
54	187/232	133	.806034	$0x, 0y$	$54x, 133y$	$67x, 165y$

$$2/1.74840288125 = 1.14390111195 \dots \text{ (Meta-Slendro2) } p2$$

$$\text{Log}_2 = .193962339298 \dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d} \downarrow \text{dec.}$	Root	Generator	Octave
				$0x, 0y$	a_x, e_y	b_x, f_y
0	1	0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			←			
0	1	2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
			←			
0	1	3	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$
			←			
0	1	4	.200000	$0x, 0y$	$0x, 1y$	$1x, 4y$
			←			
0	1	5	.166667	$0x, 0y$	$0x, 1y$	$1x, 5y$
			→			
1	2	1	.181818	$0x, 0y$	$1x, 1y$	$6x, 5y$
			→			
2	3	1	.187500	$0x, 0y$	$2x, 1y$	$11x, 5y$
			→			
3	4	1	.190476	$0x, 0y$	$3x, 1y$	$16x, 5y$
			→			
4	5	1	.192308	$0x, 0y$	$4x, 1y$	$21x, 5y$
			→			
5	6	1	.193548	$0x, 0y$	$5x, 1y$	$26x, 5y$
			→			
6	7	1	.194444	$0x, 0y$	$6x, 1y$	$31x, 5y$
			←			
6	13	7	.194030	$0x, 0y$	$6x, 7y$	$31x, 36y$
			←			
6	19	13	.193878	$0x, 0y$	$6x, 13y$	$31x, 67y$
			→			
19	32	13	.193939	$0x, 0y$	$19x, 13y$	$98x, 67y$
			→			
32	45	13	.193966	$0x, 0y$	$32x, 13y$	$165x, 67y$

$$G = (1+G^3)^{(1/5)} = 1.23650570339\dots$$

$$\text{Log}_2 .306268894183\dots$$

a	c	e	c	Root Generator	Octave
b	d	f	d dec.	$0x, 0y$	a_x, e_y
				$0x, 0y$	b_x, f_y
0	1	1	1.000000	$0x, 0y$	$1x, 0y$
1	1	0	←	$0x, 1y$	
0	1	1	.500000	$0x, 0y$	$1x, 1y$
1	2	1	←	$0x, 1y$	
0	1	1	.333333	$0x, 0y$	$1x, 2y$
1	3	2	←	$0x, 1y$	
0	1	1	.250000	$0x, 0y$	$1x, 3y$
1	4	3	→	$0x, 1y$	
1	2	1	.285714	$0x, 0y$	$4x, 3y$
4	7	3	→	$1x, 1y$	
2	3	1	.300000	$0x, 0y$	$7x, 3y$
7	10	3	→	$2x, 1y$	
3	4	1	.307692	$0x, 0y$	$10x, 3y$
10	13	3	←	$3x, 1y$	
3	7	4	.304348	$0x, 0y$	$10x, 13y$
10	23	13	→	$3x, 4y$	
7	11	4	.305556	$0x, 0y$	$23x, 13y$
23	36	13	→	$7x, 4y$	
11	15	4	.306122	$0x, 0y$	$36x, 13y$
36	49	13	→	$11x, 4y$	
15	19	4	.306452	$0x, 0y$	$49x, 13y$
49	62	13	←	$15x, 4y$	
15	34	19	.306306	$0x, 0y$	$62x, 19y$
49	111	62	←	$15x, 19y$	
15	49	34	.306250	$0x, 0y$	$111x, 62y$
49	160	111	→	$15x, 34y$	
49	83	34	.306273	$0x, 0y$	$160x, 111y$
160	271	111	←	$49x, 34y$	
49	132	83	.306265	$0x, 0y$	$271x, 111y$
160	431	271	→	$49x, 83y$	
132	215	83	.3062678	$0x, 0y$	$431x, 271y$
431	702	271	→	$132x, 83y$	
215	298	83	.3062693	$0x, 0y$	$702x, 271y$
702	973	271	→	$215x, 83y$	

$$2/G = 2/(1+G^3)^{1/5} = 1.61746120096\dots$$

$$\log_2 .693731105817\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f			$0x, 0y$	a, x, e, y	b, x, f, y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				→			
1	2	1	.666667		$0x, 0y$	$1x, 1y$	$2x, 1y$
				→			
2	3	1	.750000		$0x, 0y$	$2x, 1y$	$3x, 1y$
				←			
2	5	3	.714286		$0x, 0y$	$2x, 3y$	$3x, 4y$
				←			
2	7	5	.700000		$0x, 0y$	$2x, 5y$	$3x, 7y$
				←			
2	9	7	.692308		$0x, 0y$	$2x, 7y$	$3x, 10y$
				→			
9	16	7	.695652		$0x, 0y$	$9x, 7y$	$13x, 10y$
				←			
9	25	16	.694444		$0x, 0y$	$9x, 16y$	$13x, 23y$
				←			
9	34	25	.693878		$0x, 0y$	$9x, 25y$	$13x, 36y$
				←			
9	43	34	.693548		$0x, 0y$	$9x, 34y$	$13x, 49y$
				→			
43	77	34	.693694		$0x, 0y$	$43x, 34y$	$62x, 49y$
				→			
77	111	34	.693750		$0x, 0y$	$77x, 34y$	$111x, 49y$
				←			
77	188	111	.693727		$0x, 0y$	$77x, 111y$	$111x, 160y$
				→			
188	299	111	.693735		$0x, 0y$	$188x, 111y$	$271x, 160y$
				←			
188	487	299	.693732		$0x, 0y$	$188x, 299y$	$271x, 431y$
				←			

$$G = (1+G^2)^{\frac{1}{5}} = 1.19385911132\dots$$

$\log_2 .255632592555\dots$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec	Root Generator Octave
$0x, 0y$	ax, ey	bx, fy		
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0/1	1/3	1/2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0/1	1/4	1/3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			→	
1/4	2/7	1/3	.285714	$0x, 0y$ $1x, 1y$ $4x, 3y$
			←	
1/4	3/11	2/7	.272727	$0x, 0y$ $1x, 2y$ $4x, 7y$
			←	✓
1/4	4/15	3/11	.266667	$0x, 0y$ $1x, 3y$ $4x, 11y$
			←	✓ good!
1/4	5/19	4/15	.263158	$0x, 0y$ $1x, 4y$ $4x, 15y$
			←	✓
1/4	6/23	5/19	.260870	$0x, 0y$ $1x, 5y$ $4x, 19y$
			←	✓
1/4	7/27	6/23	.259259	$0x, 0y$ $1x, 6y$ $4x, 23y$
			←	
1/4	8/31	7/27	.258065	$0x, 0y$ $1x, 7y$ $4x, 27y$
			←	
1/4	9/35	8/31	.257143	$0x, 0y$ $1x, 8y$ $4x, 31y$
			←	
1/4	10/39	9/35	.256410	$0x, 0y$ $1x, 9y$ $4x, 35y$
			←	
1/4	11/43	10/39	.255814	$0x, 0y$ $1x, 10y$ $4x, 39y$
			←	
1/4	12/47	11/43	.2555319	$0x, 0y$ $1x, 11y$ $4x, 43y$
			→	
12/47	23/90	11/43	.255556	$0x, 0y$ $12x, 11y$ $47x, 43y$
			→	

5.7

34/133
←

$$2/G = 2/(1+G^2)^{(\frac{1}{5})} = 1.67523954966 \dots$$

$\log_2 .744367407445 \dots$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	2	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2	3	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3	4	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			←	
2	5	7	.714286	$0x, 0y$ $2x, 3y$ $3x, 4y$
			→	
5	8	11	.727273	$0x, 0y$ $5x, 3y$ $7x, 4y$
			→	
8	11	15	.733333	$0x, 0y$ $8x, 3y$ $11x, 4y$
			→	
11	14	19	.736842	$0x, 0y$ $11x, 3y$ $15x, 4y$
			→	
14	17	23	.739130	$0x, 0y$ $14x, 3y$ $19x, 4y$
			→	
17	20	27	.740741	$0x, 0y$ $17x, 3y$ $23x, 4y$
			→	
20	23	31	.741935	$0x, 0y$ $20x, 3y$ $27x, 4y$
			→	
23	26	35	.742857	$0x, 0y$ $23x, 3y$ $31x, 4y$
			→	
26	29	39	.743590	$0x, 0y$ $26x, 3y$ $35x, 4y$
			→	
29	32	43	.744186	$0x, 0y$ $29x, 3y$ $39x, 4y$
			→	
32	35	47	.744681	$0x, 0y$ $32x, 3y$ $43x, 4y$
			←	
32	67	90	.744444	$0x, 0y$ $32x, 35y$ $43x, 47y$
			←	

$$G = (1+G)^{(1/5)} = 1.16730397826\dots$$

6 7 13

$$\rightarrow \log_2 \underline{.223180302967\dots}$$

NLIS

a	c	e	c	dec.	Root	Generator	Octave
b	d	f	d		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				←			
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
				→			
1	2	1	.222222		$0x, 0y$	$1x, 1y$	$5x, 4y$
				→			
2	3	1	.230769		$0x, 0y$	$2x, 1y$	$9x, 4y$
				←			
2	5	3	.227273		$0x, 0y$	$2x, 3y$	$9x, 13y$
				←			
2	7	5	.225806		$0x, 0y$	<u>$2x, 5y$</u>	$9x, 22y$
				←			
2	9	7	.225000		$0x, 0y$	$2x, 7y$	$9x, 31y$
				←			
2	11	9	.224490		$0x, 0y$	$2x, 9y$	$9x, 40y$
				←			
2	13	11	.224138		$0x, 0y$	$2x, 11y$	$9x, 49y$
				←			
2	15	13	.223881		$0x, 0y$	$2x, 13y$	$9x, 58y$
				←			
2	17	15	.223684		$0x, 0y$	$2x, 15y$	$9x, 67y$
				←			
2	19	17	.223529		$0x, 0y$	$2x, 17y$	$9x, 76y$
				←			
2	21	19	.223404		$0x, 0y$	$2x, 19y$	$9x, 85y$
				←			
to	25	112					

! Surupan Mëlog, Kunst

2.29

5.17

!

8MAROO·EW

$$2/G = 2/(1+G)^{1/5} = 1.71334976771\dots$$

14:19:24
7 12 19

$$\rightarrow \log_2 .776819697033\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1/2	2/3	1/1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			→			
2/3	3/4	1/1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
			→			
3/4	4/5	1/1	.800000	$0x, 0y$	$3x, 1y$	$4x, 1y$
			←			
3/4	7/9	4/5	.777778	$0x, 0y$	$3x, 4y$	$4x, 5y$
			←			
3/4	10/13	7/9	.769231	$0x, 0y$	$3x, 7y$	$4x, 9y$
			→			
10/13	17/22	7/9	.772727	$0x, 0y$	$10x, 7y$	$13x, 9y$
			→			
17/22	24/31	7/9	.774194	$0x, 0y$	$17x, 7y$	$22x, 9y$
			→			
24/31	31/40	7/9	.775000	$0x, 0y$	$24x, 7y$	$31x, 9y$
			→			
31/40	38/49	7/9	.775510	$0x, 0y$	$31x, 7y$	$40x, 9y$
			→			
38/49	45/58	7/9	.775862	$0x, 0y$	$38x, 7y$	$49x, 9y$
			→			
45/58	52/67	7/9	.776119	$0x, 0y$	$45x, 7y$	$58x, 9y$
			→			
52/67	59/76	7/9	.776316	$0x, 0y$	$52x, 7y$	$67x, 9y$
			→			
59/76	66/85	7/9	.776471	$0x, 0y$	$59x, 7y$	$76x, 9y$
			→			
66/85	73/94	7/9	.776596	$0x, 0y$	$66x, 7y$	$85x, 9y$
			→			

1-ZIG, 2-ZAG

29Feb00.EW

1.36602540378

0	$\frac{1}{1}$	1	1.000000
		0	→
1	$\frac{2}{1}$	1	2.000000
		0	←
1	$\frac{3}{2}$	2	1.500000
		1	←
1	$\frac{4}{3}$	3	1.333333
		2	→
4	$\frac{7}{5}$	3	1.400000
3		2	←
4	$\frac{11}{8}$	7	1.375000
3		5	←
4	$\frac{15}{11}$	11	1.363636
3		8	→
15	$\frac{26}{19}$	11	1.368421
11		8	←
15	$\frac{41}{30}$	26	1.366667
11		19	←
15	$\frac{56}{41}$	41	1.365854
11		30	→
56	$\frac{97}{71}$	41	1.366197
41		30	←
56	$\frac{153}{112}$	97	1.366071
41		71	←
56	$\frac{209}{153}$	153	1.366013
41		112	→
209	$\frac{362}{265}$	153	1.366038
153		112	←
209	$\frac{571}{418}$	362	1.366029
153		265	←
209	$\frac{780}{571}$	571	1.366024518
153		418	→

5.53

11.19

$$G = (1+G^5)^{(1/6)} = 1.28519903326... \quad (\times 277 = 356.000132) ?$$

$$\rightarrow \text{Log}_2 \quad .361991800713...$$

a	c	e	c	Root Generator	Octave	
b	d	f	d	$0x, 0y$	a_x, e_y	
			dec.	b_x, f_y		
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	
1	1	0		$1x, 0y$		
←						
0	1	1	.500000	$0x, 0y$	$0x, 1y$	
1	2	1		$1x, 1y$		
←						
0	1	1	.333333	$0x, 0y$	$0x, 1y$	
1	3	2		$1x, 2y$		
→						
1	2	1	.400000	$0x, 0y$	$1x, 1y$	
3	5	2		$3x, 2y$		
←						
1	3	2	.375000	$0x, 0y$	$1x, 2y$	
3	8	5		$3x, 5y$		
←						
1	4	3	.363636	$0x, 0y$	$1x, 3y$	
3	11	8		$3x, 8y$		
←						
1	5	4	.357143	$0x, 0y$	$1x, 4y$	
3	14	11		$3x, 11y$		
→						
5	9	4	.360000	$0x, 0y$	$5x, 4y$	
14	25	11		$14x, 11y$		
→						
9	13	4	.361111	$0x, 0y$	$9x, 4y$	
25	36	11		$25x, 11y$		
→						
13	17	4	.361702	$0x, 0y$	$13x, 4y$	
36	47	11		$36x, 11y$		
→						
17	21	4	.362069	$0x, 0y$	$17x, 4y$	
47	58	11		$47x, 11y$		
←						
17	38	21	.361905	$0x, 0y$	$17x, 21y$	
47	105	58		$47x, 58y$		
→						
38	59	21	.361963	$0x, 0y$	$38x, 21y$	
105	163	58		$105x, 58y$		
→						
59	80	21	.36199095	$0x, 0y$	$59x, 21y$	
163	221	58		$163x, 58y$		
→						
80	101	21	.362007	$0x, 0y$	$80x, 21y$	
221	279	58		$221x, 58y$		
←						
80	181	101	.362000	$0x, 0y$	$80x, 101y$	
221	500	279		$221x, 279y$		
←						

3.12 !

2.29

5x21

13.17 ✓!

9.31

✓ good

$$2/G = 2/(1+G^5)^{(1/6)} = 1.55617919734\dots$$

$$\rightarrow \log_2 .638008199287\dots$$

Gen. Oct.	a	c	e	c	Root Generator Octave
	b	d	f	d	
	0	1	1	1.000000	$0x, 0y$
	1	1	0	←	$0x, 1y$
	0	1/2	1	.500000	$1x, 0y$
	1	2	1	→	$1x, 1y$
	1	2/3	1	.666667	$2x, 0y$
	2	3	1	←	$1x, 1y$
	1	3/5	2/3	.600000	$2x, 1y$
	2	5	3	→	$2x, 2y$
	3	5/8	2/3	.625000	$3x, 0y$
	5	8	3	→	$3x, 2y$
	5	7/11	2/3	.636364	$5x, 0y$
	8	11	3	→	$5x, 2y$
	7	9/14	2/3	.642857	$7x, 0y$
	11	14	3	→	$7x, 2y$
	7	16/25	9/14	.640000	$11x, 0y$
	11	25	14	←	$7x, 9y$
	7	23/36	16/25	.638889	$11x, 14y$
	11	36	25	←	$7x, 16y$
	7	30/47	23/36	.638298	$11x, 25y$
	11	47	36	←	$7x, 23y$
	7	37/58	30/47	.637931	$11x, 36y$
	11	58	47	←	$7x, 30y$
	37	67/105	30/47	.638095	$11x, 47y$
	58	105	47	→	$37x, 30y$
	37	104/163	67/105	.638037	$58x, 0y$
	58	163	105	←	$37x, 67y$
	37	141/221	104/163	.638009	$58x, 105y$
	58	221	163	←	$37x, 104y$
	37	178/279	141/221	.637993	$58x, 163y$
	58	279	221	→	$37x, 141y$
	178	319/500	141/221	.638000	$58x, 221y$
	279	500	221	→	$37x, 178y$

$$G = (1+G)^{(1/6)} = 1.13472413840\dots$$

$$\rightarrow \log_2 .182341608058\dots$$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ ax, ey bx, fy
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0	←	
0	1	2	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1	←	
0	1	3	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
1	3	2	←	
0	1	4	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
1	4	3	←	
0	1	5	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
1	5	4	←	
0	1	6	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
1	6	5	→	
1	6	5	.181818	$0x, 0y$ $1x, 1y$ $6x, 5y$
6	11	5	→	
2	3	1	.187500	$0x, 0y$ $2x, 1y$ $11x, 5y$
11	16	5	←	
2	5	3	.185185	$0x, 0y$ $2x, 3y$ $11x, 16y$
11	27	16	←	
2	7	5	.184211	$0x, 0y$ <u>$2x, 5y$</u> $11x, 27y$
11	38	27	←	new
2	9	7	.183673	$0x, 0y$ $2x, 7y$ $11x, 38y$
11	49	38	←	
2	11	9	.183333	$0x, 0y$ $2x, 9y$ $11x, 49y$
11	60	49	←	
2	13	11	.183099	$0x, 0y$ $2x, 11y$ $11x, 60y$
11	71	60	←	
2	15	13	.182927	$0x, 0y$ $2x, 13y$ $11x, 71y$
11	82	71	←	
2	17	15	.182796	$0x, 0y$ $2x, 15y$ $11x, 82y$
11	93	82	←	
2	19	17	.182692	$0x, 0y$ $2x, 17y$ $11x, 93y$
11	104	93	←	
etc			←	

2.19

2.41

331

$$2/G = 2/(1+G)^{(1/6)} = 1.76254292327\dots$$

→ Log_2 .817658391942...

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator a_x, e_y	Octave b_x, f_y
0/1	1/1	0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1/2	2/3	1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			→			
2/3	3/4	1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
			→			
3/4	4/5	1	.800000	$0x, 0y$	$3x, 1y$	$4x, 1y$
			→			
4/5	5/6	1	.833333	$0x, 0y$	$4x, 1y$	$5x, 1y$
			←			
4/5	9/11	5/6	.818182	$0x, 0y$	$4x, 5y$	$5x, 6y$
			←			
4/5	13/16	9/11	.812500	$0x, 0y$	$4x, 9y$	$5x, 11y$
			→			
13/16	22/27	9/11	.814815	$0x, 0y$	$13x, 9y$	$16x, 11y$
			→			
22/27	31/38	9/11	.815789	$0x, 0y$	$22x, 9y$	$27x, 11y$
			→			
31/38	40/49	9/11	.816327	$0x, 0y$	$31x, 9y$	$38x, 11y$
			→			
40/49	49/60	9/11	.816667	$0x, 0y$	$40x, 9y$	$49x, 11y$
			→			
49/60	58/71	9/11	.816901	$0x, 0y$	$49x, 9y$	$60x, 11y$
			→			
58/71	67/82	9/11	.817073	$0x, 0y$	$58x, 9y$	$71x, 11y$
			→			
67/82	76/93	9/11	.817204	$0x, 0y$	$67x, 9y$	$82x, 11y$
			→			
76/93	85/104	9/11	.817308	$0x, 0y$	$76x, 9y$	$93x, 11y$
			→			

$$G = (1+6^6)^{(1/7)} = 1.25542287107\dots$$

$$\rightarrow \text{Log}_2 \underline{.328173397034\dots}$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root $0x, 0y$	Generator ax, ey	Octave bx, fy
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			←			
0/1	1/3	1/2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
			←			
0/1	1/4	1/3	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$
			→			
1/4	2/7	1/3	.285714	$0x, 0y$	$1x, 1y$	$4x, 3y$
			→			
2/7	3/10	1/3	.300000	$0x, 0y$	$2x, 1y$	$7x, 3y$
			→			
3/10	4/13	1/3	.307692	$0x, 0y$	$3x, 1y$	$10x, 3y$
			→			
4/13	5/16	1/3	.312500	$0x, 0y$	$4x, 1y$	$13x, 3y$
			→			
5/16	6/19	1/3	.315789	$0x, 0y$	$5x, 1y$	$16x, 3y$
			→			
6/19	7/22	1/3	.318182	$0x, 0y$	$6x, 1y$	$19x, 3y$
			→			
7/22	8/25	1/3	.320000	$0x, 0y$	$7x, 1y$	$22x, 3y$
			→			
8/25	9/28	1/3	.321429	$0x, 0y$	$8x, 1y$	$25x, 3y$
			→			
9/28	10/31	1/3	.322581	$0x, 0y$	$9x, 1y$	$28x, 3y$
			→			
10/31	11/34	1/3	.323529	$0x, 0y$	$10x, 1y$	$31x, 3y$
			→			
11/34	12/37	1/3	.324324	$0x, 0y$	$11x, 1y$	$34x, 3y$
			→			
12/37	13/40	1/3	.325000	$0x, 0y$	$12x, 1y$	$37x, 3y$

→ (see $\frac{21}{24}$) 21 pl. →

$$2/G = 2/(1+6^6)^{(1/7)} = 1.59308870827\dots$$

$$\rightarrow \text{Log}_2 .671826602966\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave
$0x, 0y$	$1x, 1y$	$2x, 2y$		$0x, 0y$	$1x, 1y$	$2x, 2y$
0/1	1/1	1/0	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0/1	1/2	1/1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			→			
1/2	2/3	1/1	.666667	$0x, 0y$	$1x, 1y$	$2x, 1y$
			→			
2/3	3/4	1/1	.750000	$0x, 0y$	$2x, 1y$	$3x, 1y$
			←			
2/3	5/7	3/4	.714286	$0x, 0y$	$2x, 3y$	$3x, 4y$
			←			
2/3	7/10	5/7	.700000	$0x, 0y$	$2x, 5y$	$3x, 7y$
			←			
2/3	9/13	7/10	.692308	$0x, 0y$	$2x, 7y$	$3x, 10y$
			←			
2/3	11/16	9/13	.687500	$0x, 0y$	$2x, 9y$	$3x, 13y$
			←			
2/3	13/19	11/16	.684211	$0x, 0y$	$2x, 11y$	$3x, 16y$
			←			
2/3	15/22	13/19	.681818	$0x, 0y$	$2x, 13y$	$3x, 19y$
			←			
2/3	17/25	15/22	.680000	$0x, 0y$	$2x, 15y$	$3x, 22y$
			←			
2/3	19/28	17/25	.678571	$0x, 0y$	$2x, 17y$	$3x, 25y$
			←			
2/3	21/31	19/28	.677419	$0x, 0y$	$2x, 19y$	$3x, 28y$
			←			
2/3	23/34	21/31	.676471	$0x, 0y$	$2x, 21y$	$3x, 31y$
			←			
2/3	25/37	23/34	.675676	$0x, 0y$	$2x, 23y$	$3x, 34y$
			←			
2/3	27/40	25/37	.675000	$0x, 0y$	$2x, 25y$	$3x, 37y$

$$G = (1 + G^5)^{(1/7)} = 1.19071270709\dots$$

$$\rightarrow \text{Log}_2 \quad .251825364457\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave	
				$0x, 0y$	ax, ey	bx, fy	
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$	
			←				
0	1	2	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$	
			←				
0	1	3	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$	✓
			←				
0	1	4	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$	✓
			→				
1	4	2	.285714	$0x, 0y$	$1x, 1y$	$4x, 3y$	
			←				
1	4	3	.272727	$0x, 0y$	$1x, 2y$	$4x, 7y$	✓
			←				
1	4	4	.266667	$0x, 0y$	$1x, 3y$	$4x, 11y$	✓
			←				
1	4	5	.263158	$0x, 0y$	$1x, 4y$	$4x, 15y$	✓
			←				
1	4	6	.260870	$0x, 0y$	$1x, 5y$	$4x, 19y$	
			←				
1	4	7	.259259	$0x, 0y$	$1x, 6y$	$4x, 23y$	
			←				
1	4	8	.258065	$0x, 0y$	$1x, 7y$	$4x, 27y$	
			←				
1	4	9	.257143	$0x, 0y$	$1x, 8y$	$4x, 31y$	
			←				
1	4	10	.256410	$0x, 0y$	$1x, 9y$	$4x, 35y$	
			←				
1	4	11	.255814	$0x, 0y$	$1x, 10y$	$4x, 39y$	
			←				
1	4	12	.255319	$0x, 0y$	$1x, 11y$	$4x, 43y$	
			←				
1	4	13	.254902	$0x, 0y$	$1x, 12y$	$4x, 47y$	
			←				

See $34/135$

33 Places

13MAR00.EW

$$2/G = 2/(1+G^5)^{(1/7)} = 1.67966629405\dots$$

$$\rightarrow \text{Log}_2 \underline{.748174635543\dots}$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ a_n, e_y d_n, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1/2	2/3	1/1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2/3	3/4	1/1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			←	
2/3	5/7	3/4	.714286	$0x, 0y$ $2x, 3y$ $3x, 4y$
			→	
5/7	8/11	3/4	.727273	$0x, 0y$ $5x, 3y$ $7x, 4y$
			→	
8/11	11/15	3/4	.733333	$0x, 0y$ $8x, 3y$ $11x, 4y$
			→	
11/15	14/19	3/4	.736842	$0x, 0y$ $11x, 3y$ $15x, 4y$
			→	
14/19	17/23	3/4	.739130	$0x, 0y$ $14x, 3y$ $19x, 4y$
			→	
17/23	20/27	3/4	.740741	$0x, 0y$ $17x, 3y$ $23x, 4y$
			→	
20/27	23/31	3/4	.741935	$0x, 0y$ $20x, 3y$ $27x, 4y$
			→	
23/31	26/35	3/4	.742857	$0x, 0y$ $23x, 3y$ $31x, 4y$
			→	
26/35	29/39	3/4	.743590	$0x, 0y$ $26x, 3y$ $35x, 4y$
			→	
29/39	32/43	3/4	.744186	$0x, 0y$ $29x, 3y$ $39x, 4y$
			→	
32/43	35/47	3/4	.744681	$0x, 0y$ $32x, 3y$ $43x, 4y$
			→	
35/47	38/51	3/4	.745098	$0x, 0y$ $35x, 3y$ $47x, 4y$
			→	

$$G = (1 + G^4)^{\left(\frac{1}{7}\right)} = 1.15855189310\dots$$

$$\rightarrow \text{Log}_2 \underline{.212322665905\dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f			$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1/2	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1/3	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1/4	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		←			
0	1/5	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
1	5	4		→			
1	2/9	4	.222222		$0x, 0y$	$1x, 1y$	$5x, 4y$
5	9	4		←			
1	3/14	2	.214286		$0x, 0y$	$1x, 2y$	$5x, 9y$
5	14	2		←			
1	4/19	3	.210526		$0x, 0y$	$1x, 3y$	$5x, 14y$
5	19	3		→			
4	7/33	3	.212121		$0x, 0y$	$4x, 3y$	$19x, 14y$
19	33	3		→			
7	10/47	3	.212766		$0x, 0y$	$7x, 3y$	$33x, 14y$
33	47	3		←			
7	17/80	10	.212500		$0x, 0y$	$7x, 10y$	$33x, 47y$
33	80	10		←			
7	24/113	17	.212389		$0x, 0y$	$7x, 17y$	$33x, 80y$
33	113	17		←			
7	31/146	24	.212329		$0x, 0y$	$7x, 24y$	$33x, 113y$
33	146	24		←			
7	38/179	31	.212291		$0x, 0y$	$7x, 31y$	$33x, 146y$
33	179	31		→			
38	69/325	31	.212308		$0x, 0y$	$38x, 31y$	$179x, 146y$
179	325	31		→			
69	100/471	31	.212314		$0x, 0y$	$69x, 31y$	$325x, 146y$
325	471	31					

$$2/G = 2/(1+G^4)^{(1/7)} = 1.72629297998\dots$$

→ $\text{Log}_2 .787677334095\dots$

a	c	e	$\frac{c}{d}$	Root Generator Octave
b	d	f	$\frac{c}{d}$	$0x, 0y$ ax, ey bx, fy
0	1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
←				
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
→				
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
→				
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
→				
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$ ✓
←				
3	7/9	4	.777778	$0x, 0y$ $3x, 4y$ $4x, 5y$ ✓
→				
7	11/14	4	.785714	$0x, 0y$ $7x, 4y$ $9x, 5y$
→				
11	15/19	4	.789474	$0x, 0y$ $11x, 4y$ $14x, 5y$
←				
11	26/33	15	.787879	$0x, 0y$ $11x, 15y$ $14x, 19y$ ✓
←				
11	37/47	26	.787234	$0x, 0y$ $11x, 26y$ $14x, 33y$ ✓
→				
37	63/80	26	.787500	$0x, 0y$ $37x, 26y$ $47x, 33y$
→				
63	89/113	26	.787611	$0x, 0y$ $63x, 26y$ $80x, 33y$
→				
89	115/146	26	.787671	$0x, 0y$ $89x, 26y$ $113x, 33y$
→				
115	141/179	26	.787709	$0x, 0y$ $115x, 26y$ $146x, 33y$
←				
115	256/325	141	.787692	$0x, 0y$ $115x, 141y$ $146x, 179y$
←				
115	371/471	256	.787686	$0x, 0y$ $115x, 256y$ $146x, 325y$
←				

$$G = (1 + G^3)^{\frac{1}{7}} = 1.13818186107\dots$$

$$\rightarrow \text{Log}_2 .186731092883\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f	$\frac{c}{d}$		$0x, 0y$	$a'x, e'y$	$b'x, f'y$
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	1	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1	1	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	1		←			
0	1	1	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
1	5	4		←			
0	1	1	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
1	6	5		→			
1	2	1	.181818		$0x, 0y$	$1x, 1y$	$6x, 5y$
6	11	5		→			
2	3	1	.187500		$0x, 0y$	$2x, 1y$	$11x, 5y$
11	16	5		←			
2	5	3	.185185		$0x, 0y$	$2x, 3y$	$11x, 16y$
11	27	16		→			
5	8	3	.186047		$0x, 0y$	$5x, 3y$	$27x, 16y$
27	43	16		→			
8	11	3	.186441		$0x, 0y$	$8x, 3y$	$43x, 16y$
43	59	16		→			
11	14	3	.186667		$0x, 0y$	$11x, 3y$	$59x, 16y$
59	75	16		→			
14	17	3	.186813		$0x, 0y$	$14x, 3y$	$75x, 16y$
75	91	16		←			
14	31	17	.186747		$0x, 0y$	$14x, 17y$	$75x, 91y$
75	166	91		←			
14	45	31	.186722		$0x, 0y$	$14x, 31y$	$75x, 166y$
75	241	166		→			
45	76	31	.186732		$0x, 0y$	$45x, 31y$	$241x, 166y$
241	407	166		←			
45	121	76	.186728		$0x, 0y$	$45x, 76y$	$241x, 407y$
241	648	407		→			

$$2/G = 2/(1+G^3)^{(\frac{1}{7})} = 1.75718843219\dots$$

$$\rightarrow \text{Log}_2 .813268907117\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
b	d	f			$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		→			
1	2	1	.666667		$0x, 0y$	$1x, 1y$	$2x, 1y$
2	3	1		→			
2	3	1	.750000		$0x, 0y$	$2x, 1y$	$3x, 1y$
3	4	1		→			
3	4	1	.800000		$0x, 0y$	$3x, 1y$	$4x, 1y$
4	5	1		→			
4	5	1	.833333		$0x, 0y$	$4x, 1y$	$5x, 1y$
5	6	1		←			
4	9	5	.818182		$0x, 0y$	$4x, 5y$	$5x, 6y$
5	11	6		←			
4	13	9	.812500		$0x, 0y$	$4x, 9y$	$5x, 11y$
5	16	11		→			
13	22	9	.814815		$0x, 0y$	$13x, 9y$	$16x, 11y$
16	27	11		←			
13	35	22	.813953		$0x, 0y$	$13x, 22y$	$16x, 27y$
16	43	27		←			
13	48	35	.813559		$0x, 0y$	$13x, 35y$	$16x, 43y$
16	59	43		←			
13	61	48	.813333		$0x, 0y$	$13x, 48y$	$16x, 59y$
16	75	59		←			
13	74	61	.813187		$0x, 0y$	$13x, 61y$	$16x, 75y$
16	91	75		→			
74	135	61	.813253		$0x, 0y$	$74x, 61y$	$91x, 75y$
91	166	75		→			
135	196	61	.813278		$0x, 0y$	$135x, 61y$	$166x, 75y$
166	241	75		←			
135	331	196	.8132678		$0x, 0y$	$135x, 196y$	$166x, 241y$
166	407	241		→			

↳ new good!

$$G = (1+G^2)^{\frac{1}{7}} = 1.12373282100\dots$$

$$\rightarrow \text{Log}_2 \underline{.168299060792\dots}$$

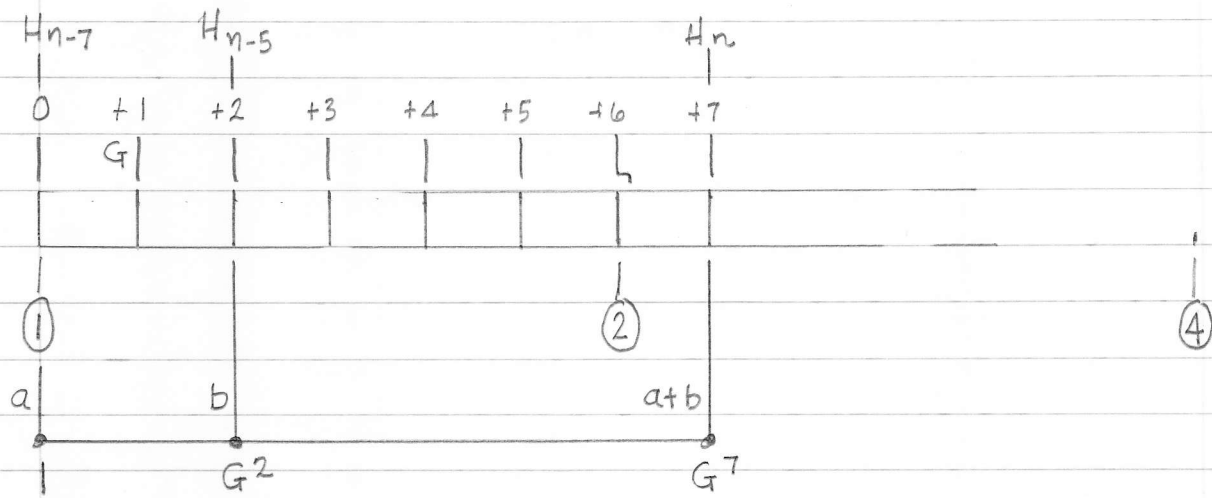
a	c	e	c	Root Generator Octave
b	d	f	d	dec. a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0	1	2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0	1	3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			←	
0	1	4	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
			←	
0	1	5	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
			→	
1	2	1	.181818	$0x, 0y$ $1x, 1y$ $6x, 5y$
			←	
1	3	2	.176471	$0x, 0y$ $1x, 2y$ $6x, 11y$
			←	← new
1	4	3	.173913	$0x, 0y$ $1x, 3y$ $6x, 17y$
			←	← new
1	5	4	.172414	$0x, 0y$ $1x, 4y$ $6x, 23y$
			←	←
1	6	5	.171429	$0x, 0y$ $1x, 5y$ $6x, 29y$
			←	
1	7	6	.170732	$0x, 0y$ $1x, 6y$ $6x, 35y$
			←	
1	8	7	.170213	$0x, 0y$ $1x, 7y$ $6x, 41y$
			←	
1	9	8	.169811	$0x, 0y$ $1x, 8y$ $6x, 47y$
			←	
1	10	9	.169492	$0x, 0y$ $1x, 9y$ $6x, 53y$
			←	
1	11	10	.169231	$0x, 0y$ $1x, 10y$ $6x, 59y$

See 17/101 etc 16pl. ←

$$2/G = 2/(1+G^2)^{(\frac{1}{7})} = 1.77978249155\dots$$

$\log_2 .831700939208\dots$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
b	d	f		$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0	←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1	→	
1	2	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
2	3	1	→	
2	3	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
3	4	1	→	
3	4	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
4	5	1	→	
4	5	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
5	6	1	←	
4	9	5	.818182	$0x, 0y$ $4x, 5y$ $5x, 6y$ ✓
5	11	6	→	
9	14	5	.823529	$0x, 0y$ $9x, 5y$ $11x, 6y$
11	17	6	→	
14	19	5	.826087	$0x, 0y$ $14x, 5y$ $17x, 6y$
17	23	6	→	
19	24	5	.827586	$0x, 0y$ $19x, 5y$ $23x, 6y$
23	29	6	→	
24	29	5	.828571	$0x, 0y$ $24x, 5y$ $29x, 6y$
29	35	6	→	
29	34	5	.829268	$0x, 0y$ $29x, 5y$ $35x, 6y$
35	41	6	→	
34	39	5	.829787	$0x, 0y$ $34x, 5y$ $41x, 6y$
41	47	6	→	
39	44	5	.830189	$0x, 0y$ $39x, 5y$ $47x, 6y$
47	53	6	→	
44	49	5	.830508	$0x, 0y$ $44x, 5y$ $53x, 6y$
53	59	6	→	
49	54	5	.830769	$0x, 0y$ $49x, 5y$ $59x, 6y$
59	65	6	→	



$$H_{n-7} + H_{n-5} = H_n$$

$$G = (1 + G^2)^{(1/7)}$$

like 64 : 81 : 145

-7	-6	-5	-4	-3	-2	-1	n
262144	294912	331776	373248	419904	472392	531441	593920

$$G = (1+G)^{\left(\frac{1}{7}\right)} = 1.11277568428\dots$$

9:10:19

$$\rightarrow \text{Log}_2 .154162800414\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root	Generator	Octave	
				$0n, 0y$	a_n, e_y	b_n, f_y	
0	1	1	1.000000	$0n, 0y$	$0n, 1y$	$1n, 0y$	
			←				
0	1	2	.500000	$0n, 0y$	$0n, 1y$	$1n, 1y$	
			←				
0	1	3	.333333	$0n, 0y$	$0n, 1y$	$1n, 2y$	
			←				
0	1	4	.250000	$0n, 0y$	$0n, 1y$	$1n, 3y$	
			←				
0	1	5	.200000	$0n, 0y$	$0n, 1y$	$1n, 4y$	
			←				
0	1	6	.166667	$0n, 0y$	$0n, 1y$	$1n, 5y$	
			←				
0	1	7	.142857	$0n, 0y$	$0n, 1y$	$1n, 6y$	
			→				
1	2	1	.153846	$0n, 0y$	$1n, 1y$	$7n, 6y$	
			→				
2	3	1	.157895	$0n, 0y$	$2n, 1y$	$13n, 6y$	
			←				
2	5	3	.156250	$0n, 0y$	$2n, 3y$	$13n, 19y$	✓
			←				
2	7	5	.155556	$0n, 0y$	<u>$2n, 5y$</u>	$13n, 32y$	✓ new
			←				
2	9	7	.155172	$0n, 0y$	$2n, 7y$	$13n, 45y$	✓
			←				
2	11	9	.154930	$0n, 0y$	$2n, 9y$	$13n, 58y$	
			←				
2	13	11	.154762	$0n, 0y$	$2n, 11y$	$13n, 71y$	
			←				
2	15	13	.154639	$0n, 0y$	$2n, 13y$	$13n, 84y$	
			←				
2	17	15	.154545	$0n, 0y$	$2n, 15y$	$13n, 97y$	
			←				

$$2/G = 2/(1+G)^{(\frac{1}{7})} = 1.79730742526\dots$$

$$\text{Log}_2 \quad .845837199586\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave
$0x, 0y$	ax, ey	bx, fy		
0/1	1/1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1/2	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2/3	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3/4	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4/5	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			→	
5/6	6/7	1	.857143	$0x, 0y$ $5x, 1y$ $6x, 1y$
			←	
5/6	11/13	6/7	.846154	$0x, 0y$ $5x, 6y$ $6x, 7y$ ✓
			←	
5/6	16/19	11/13	.842105	$0x, 0y$ $5x, 11y$ $6x, 13y$ ✗ new good
			→	
16/19	27/32	11/13	.843750	$0x, 0y$ $16x, 11y$ $19x, 13y$
			→	
27/32	38/45	11/13	.844444	$0x, 0y$ $27x, 11y$ $32x, 13y$
			→	
38/45	49/58	11/13	.844828	$0x, 0y$ $38x, 11y$ $45x, 13y$
			→	
49/58	60/71	11/13	.845070	$0x, 0y$ $49x, 11y$ $58x, 13y$
			→	
60/71	71/84	11/13	.845238	$0x, 0y$ $60x, 11y$ $71x, 13y$
			→	
71/84	82/97	11/13	.845361	$0x, 0y$ $71x, 11y$ $84x, 13y$
			→	
82/97	93/110	11/13	.845455	$0x, 0y$ $82x, 11y$ $97x, 13y$
			→	

$$G = (1 + G^7)^{\left(\frac{1}{8}\right)} = 1.23205463142\dots$$

13:56:69

3:13:16

Log₂ .301066229029...

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	1	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1	1	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		→			
1	2	1	.285714		$0x, 0y$	$1x, 1y$	$4x, 3y$
4	7	3		→			
2	3	1	.300000		$0x, 0y$	$2x, 1y$	$7x, 3y$
7	10	3		→			
3	4	1	.307692		$0x, 0y$	$3x, 1y$	$10x, 3y$
10	13	3		←			
3	7	4	.304348		$0x, 0y$	$3x, 4y$	$10x, 13y$
10	23	13		←			
3	10	7	.303030		$0x, 0y$	$3x, 7y$	$10x, 23y$
10	33	23		←			✓ new good!
3	13	10	.302326		$0x, 0y$	$3x, 10y$	$10x, 33y$
10	43	33		←			
3	16	13	.301887		$0x, 0y$	$3x, 13y$	$10x, 43y$
10	53	43		←			
3	19	16	.301587		$0x, 0y$	$3x, 16y$	$10x, 53y$
10	63	53		←			
3	22	19	.301370		$0x, 0y$	$3x, 19y$	$10x, 63y$
10	73	63		←			
3	25	22	.301205		$0x, 0y$	$3x, 22y$	$10x, 73y$
10	83	73		←			
3	28	25	.301075		$0x, 0y$	$3x, 25y$	$10x, 83y$
10	93	83		←			
3	31	28	.300971		$0x, 0y$	$3x, 28y$	$10x, 93y$
10	103	93		←			
			12 places	→			

18MAR00. EW

$$2/G = 2/(1+G^7)^{(1/8)} = 1.62330464007\dots$$

$$\rightarrow \text{Log}_2 \underline{.698933770971\dots}$$

a	c	e	c	Root Generator Octaves
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	$0n, 0y$ a_n, e_y b_n, f_y
0	1	1	1.000000	$0n, 0y$ $0n, 1y$ $1n, 0y$
			←	
0	$\frac{1}{2}$	1	.500000	$0n, 0y$ $0n, 1y$ $1n, 1y$
			→	
1	$\frac{2}{3}$	1	.666667	$0n, 0y$ $1n, 1y$ $2n, 1y$
			→	
2	$\frac{3}{4}$	1	.750000	$0n, 0y$ $2n, 1y$ $3n, 1y$
			←	
2	$\frac{5}{7}$	$\frac{3}{4}$	.714286	$0n, 0y$ $2n, 3y$ $3n, 4y$ ✓
			←	
2	$\frac{7}{10}$	$\frac{5}{7}$	.700000	$0n, 0y$ $2n, 5y$ $3n, 7y$ ✓
			←	
2	$\frac{9}{13}$	$\frac{7}{10}$	.692308	$0n, 0y$ $2n, 7y$ $3n, 10y$ ✓
			→	
9	$\frac{16}{23}$	$\frac{7}{10}$	.695652	$0n, 0y$ $9n, 7y$ $13n, 10y$
			→	
16	$\frac{23}{33}$	$\frac{7}{10}$	.696970	$0n, 0y$ $16n, 7y$ $23n, 10y$
			→	
23	$\frac{30}{43}$	$\frac{7}{10}$	.697674	$0n, 0y$ $23n, 7y$ $33n, 10y$
			→	
30	$\frac{37}{53}$	$\frac{7}{10}$	.698113	$0n, 0y$ $30n, 7y$ $43n, 10y$
			→	
37	$\frac{44}{63}$	$\frac{7}{10}$	.698413	$0n, 0y$ $37n, 7y$ $53n, 10y$
			→	
44	$\frac{51}{73}$	$\frac{7}{10}$	.698630	$0n, 0y$ $44n, 7y$ $63n, 10y$
			→	
51	$\frac{58}{83}$	$\frac{7}{10}$	.698795	$0n, 0y$ $51n, 7y$ $73n, 10y$
			→	
58	$\frac{65}{93}$	$\frac{7}{10}$	.698925	$0n, 0y$ $58n, 7y$ $83n, 10y$
			→	
65	$\frac{72}{103}$	$\frac{7}{10}$	.699029	$0n, 0y$ $65n, 7y$ $93n, 10y$
			←	

$$G = (1 + G^5)^{\frac{1}{8}} = 1.14613894966\dots$$

1:2:3

$$\rightarrow \text{Log}_2 \underline{.196781956689\dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$	a_n, e_y	b_n, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←	$0x, 0y$	$0x, 1y$	$1x, 0y$
0	1	2	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←	$0x, 0y$	$0x, 1y$	$1x, 1y$
0	1	3	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←	$0x, 0y$	$0x, 1y$	$1x, 2y$
0	1	4	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		←	$0x, 0y$	$0x, 1y$	$1x, 3y$
0	1	5	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
1	5	4		←	$0x, 0y$	$0x, 1y$	$1x, 4y$
0	1	6	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
1	6	5		→	$0x, 0y$	$0x, 1y$	$1x, 5y$
1	2	5	.181818		$0x, 0y$	$1x, 1y$	$6x, 5y$
6	11	5		→	$0x, 0y$	$1x, 1y$	$6x, 5y$
2	3	5	.187500		$0x, 0y$	$2x, 1y$	$11x, 5y$
11	16	5		→	$0x, 0y$	$2x, 1y$	$11x, 5y$
3	4	5	.190476		$0x, 0y$	$3x, 1y$	$16x, 5y$
16	21	5		→	$0x, 0y$	$3x, 1y$	$16x, 5y$
4	5	5	.192308		$0x, 0y$	$4x, 1y$	$21x, 5y$
21	26	5		→	$0x, 0y$	$4x, 1y$	$21x, 5y$
5	6	5	.193548		$0x, 0y$	$5x, 1y$	$26x, 5y$
26	31	5		→	$0x, 0y$	$5x, 1y$	$26x, 5y$
6	7	5	.194444		$0x, 0y$	$6x, 1y$	$31x, 5y$
31	36	5		→	$0x, 0y$	$6x, 1y$	$31x, 5y$
7	8	5	.195122		$0x, 0y$	$7x, 1y$	$36x, 5y$
36	41	5		→	$0x, 0y$	$7x, 1y$	$36x, 5y$
8	9	5	.195652		$0x, 0y$	$8x, 1y$	$41x, 5y$
41	46	5		→	$0x, 0y$	$8x, 1y$	$41x, 5y$
9	10	5	.196078		$0x, 0y$	$9x, 1y$	$46x, 5y$
46	51	5		→	$0x, 0y$	$9x, 1y$	$46x, 5y$
10	11	5	.196429		$0x, 0y$	$10x, 1y$	$51x, 5y$
51	56	5		→	$0x, 0y$	$10x, 1y$	$51x, 5y$
11	12	5	.196721		$0x, 0y$	$11x, 1y$	$56x, 5y$
56	61	5		→	$0x, 0y$	$11x, 1y$	$56x, 5y$
12	13	5	.196970				
61	66	5		←			

$$2/G = 2/(1+G^5)^{1/8} = 1.74498912247\dots$$

1:2:3

$$\rightarrow \text{Log}_2 .803218043311\dots$$

a	c	e	c	Root Generator Octave
b	d	f	d dec.	$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			←	
4	9/11	5	.818182	$0x, 0y$ $4x, 5y$ $5x, 6y$ ✓
			←	
4	13/16	9	.812500	$0x, 0y$ $4x, 9y$ $5x, 11y$ ✓
			←	
4	17/21	13	.809524	$0x, 0y$ $4x, 13y$ $5x, 16y$ ✓
			←	
4	21/26	17	.807692	$0x, 0y$ $4x, 17y$ $5x, 21y$
			←	
4	25/31	21	.806452	$0x, 0y$ $4x, 21y$ $5x, 26y$
			←	
4	29/36	25	.805556	$0x, 0y$ $4x, 25y$ $5x, 31y$
			←	
4	33/41	29	.804878	$0x, 0y$ $4x, 29y$ $5x, 36y$
			←	
4	37/46	33	.804348	$0x, 0y$ $4x, 33y$ $5x, 41y$
			←	
4	41/51	37	.803922	$0x, 0y$ $4x, 37y$ $5x, 46y$
			←	
4	45/56	41	.803571	$0x, 0y$ $4x, 41y$ $5x, 51y$
			←	
4	49/61	45	.803279	$0x, 0y$ $4x, 45y$ $5x, 56y$
			←	

$$G = (1+G^3)^{\frac{1}{3}} = 1.11479780585\dots$$

13:18:31

→ Log_2 .156782068038...

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	2	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	3	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	4	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				←			
0	1	5	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
				←			
0	1	6	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
				←			
0	1	7	.142857		$0x, 0y$	$0x, 1y$	$1x, 6y$
				→			
1	2	1	.153846		$0x, 0y$	$1x, 1y$	$7x, 6y$
				→			
2	3	1	.157895		$0x, 0y$	$2x, 1y$	$13x, 6y$
				←			
2	5	3	.156250		$0x, 0y$	$2x, 3y$	$13x, 19y$
				→			
5	8	3	.156863		$0x, 0y$	$5x, 3y$	$32x, 19y$
				←			
5	13	8	.156627		$0x, 0y$	$5x, 8y$	$32x, 51y$
				→			
13	21	8	.156716		$0x, 0y$	$13x, 8y$	$83x, 51y$
				→			
21	29	8	.156757		$0x, 0y$	$21x, 8y$	$134x, 51y$
				→			
29	37	8	.156780		$0x, 0y$	$29x, 8y$	$185x, 51y$
				→			
37	45	8	.156794		$0x, 0y$	$37x, 8y$	$236x, 51y$
				←			
7	places						

$$2/G = 2/(1+G^3)^{1/8} = 1.79404730571\dots$$

$$\rightarrow \text{Log}_2 .843217931962\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$	dec.	$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
			←		
0	1/2	1	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
			→		
1	2/3	1	.666667		$0x, 0y$ $1x, 1y$ $2x, 1y$
			→		
2	3/4	1	.750000		$0x, 0y$ $2x, 1y$ $3x, 1y$
			→		
3	4/5	1	.800000		$0x, 0y$ $3x, 1y$ $4x, 1y$
			→		
4	5/6	1	.833333		$0x, 0y$ $4x, 1y$ $5x, 1y$
			→		
5	6/7	1	.857143		$0x, 0y$ $5x, 1y$ $6x, 1y$
			←		
5	11/13	6	.846154		$0x, 0y$ $5x, 6y$ $6x, 7y$ ✓
			←		
5	16/19	11	.842104		$0x, 0y$ $5x, 11y$ $6x, 13y$ ✓
			→		
16	27/32	11	.843750		$0x, 0y$ $16x, 11y$ $19x, 13y$
			←		
16	43/51	27	.843137		$0x, 0y$ $16x, 27y$ $19x, 32y$ ✓
			→		
43	70/83	27	.843373		$0x, 0y$ $43x, 27y$ $51x, 32y$
			←		
43	113/134	70	.843284		$0x, 0y$ $43x, 70y$ $51x, 83y$
			←		
43	156/185	113	.843243		$0x, 0y$ $43x, 113y$ $51x, 134y$
			←		
43	199/236	156	.843220		$0x, 0y$ $43x, 156y$ $51x, 185y$
			←		
43	242/287	199	.843206		$0x, 0y$ $43x, 199y$ $51x, 236y$
			→		

$$G = (1+G)^{\left(\frac{1}{8}\right)} = 1.09698155780\dots$$

$$\rightarrow \text{Log}_2 .133539271690\dots$$

10:11:21

21:23:44

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ a_x, e_y b_x, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0/1	1/3	1/2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$ ✓
			←	
0/1	1/4	1/3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$ ✓
			←	
0/1	1/5	1/4	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
			←	
0/1	1/6	1/5	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
			←	
0/1	1/7	1/6	.142857	$0x, 0y$ $0x, 1y$ $1x, 6y$
			←	
0/1	1/8	1/7	.125000	$0x, 0y$ $0x, 1y$ $1x, 7y$
			→	
1/8	2/15	1/7	.133333	$0x, 0y$ $1x, 1y$ $8x, 7y$
			→	
2/15	3/22	1/7	.136364	$0x, 0y$ $2x, 1y$ $15x, 7y$
			←	
2/15	5/37	3/22	.135135	$0x, 0y$ $2x, 3y$ $15x, 22y$ ✓
			←	
2/15	7/52	5/37	.134615	$0x, 0y$ <u>$2x, 5y$</u> $15x, 37y$ ✓
			←	
2/15	9/67	7/52	.134328	$0x, 0y$ $2x, 7y$ $15x, 52y$ ✓
			←	
2/15	11/82	9/67	.134146	$0x, 0y$ $2x, 9y$ $15x, 67y$
			←	
2/15	13/97	11/82	.134021	$0x, 0y$ $2x, 11y$ $15x, 82y$
			←	
2/15	15/112	13/97	.133929	$0x, 0y$ $2x, 13y$ $15x, 97y$

21 places ←

$$2/G = 2/(1+G)^{\left(\frac{1}{8}\right)} = 1.82318470696\dots$$

$$\rightarrow \text{Log}_2 .866460728310\dots$$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$ a_n, e_y b_n, f_y
0	1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			→	
5	6/7	1	.857143	$0x, 0y$ $5x, 1y$ $6x, 1y$
			→	
6	7/8	1	.875000	$0x, 0y$ $6x, 1y$ $7x, 1y$
			←	
6	13/15	7	.866667	$0x, 0y$ $6x, 7y$ $7x, 8y$
			←	
6	19/22	13	.863636	$0x, 0y$ $6x, 13y$ $7x, 15y$
			→	
19	32/37	13	.864865	$0x, 0y$ $19x, 13y$ $22x, 15y$
			→	
32	45/52	13	.865385	$0x, 0y$ $32x, 13y$ $37x, 15y$
			→	
45	58/67	13	.865672	$0x, 0y$ $45x, 13y$ $52x, 15y$
			→	
58	71/82	13	.865854	$0x, 0y$ $58x, 13y$ $67x, 15y$
			→	
71	84/97	13	.865979	$0x, 0y$ $71x, 13y$ $82x, 15y$
			→	
84	97/112	13	.866071	$0x, 0y$ $84x, 13y$ $97x, 15y$
			→	

✓ new good

$$G = (1 + G^8)^{\frac{1}{9}} = 1.21314972305\dots$$

$$\rightarrow \text{Log}_2 .278757614244\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ a_x, e_y b_x, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0/1	1/3	1/2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0/1	1/4	1/3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			→	
1/4	2/7	1/3	.285714	$0x, 0y$ $1x, 1y$ $4x, 3y$
			←	
1/4	3/11	2/7	.272727	$0x, 0y$ $1x, 2y$ $4x, 7y$
			→	
3/11	5/18	2/7	.277778	$0x, 0y$ $3x, 2y$ $11x, 7y$
			→	
5/18	7/25	2/7	.280000	$0x, 0y$ $5x, 2y$ $18x, 7y$
			←	
5/18	12/43	7/25	.279070	$0x, 0y$ $5x, 7y$ $18x, 25y$
			←	
5/18	17/61	12/43	.278689	$0x, 0y$ $5x, 12y$ $18x, 43y$
			→	
17/61	29/104	12/43	.278846	$0x, 0y$ $17x, 12y$ $61x, 43y$
			←	
17/61	46/165	29/104	.278788	$0x, 0y$ $17x, 29y$ $61x, 104y$
			←	
17/61	63/226	46/165	.278761	$0x, 0y$ $17x, 46y$ $61x, 165y$
			←	
17/61	80/287	63/226	.278746	$0x, 0y$ $17x, 63y$ $61x, 226y$
			→	
80/287	143/513	63/226	.278752	$0x, 0y$ $80x, 63y$ $287x, 226y$
			→	
143/513	206/739	63/226	.278755	$0x, 0y$ $143x, 63y$ $513x, 226y$
			→	

$$2/G = 2/(1+G^8)^{1/9} = 1.64860112647\dots$$

$\text{Log}_2 .721242385756\dots$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ a_n, e_y b_n, f_y
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1/2	2/3	1/1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2/3	3/4	1/1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$ ✓
			←	
2/3	5/7	3/4	.714286	$0x, 0y$ $2x, 3y$ $3x, 4y$ ✓
			→	
5/7	8/11	3/4	.727273	$0x, 0y$ $5x, 3y$ $7x, 4y$
			←	
5/7	13/18	8/11	.722222	$0x, 0y$ $5x, 8y$ $7x, 11y$ ✓
			←	
5/7	18/25	13/18	.720000	$0x, 0y$ $5x, 13y$ $7x, 18y$ ✓ new good!
			→	
18/25	31/43	13/18	.720930	$0x, 0y$ $18x, 13y$ $25x, 18y$
			→	
31/43	44/61	13/18	.721311	$0x, 0y$ $31x, 13y$ $43x, 18y$
			←	
31/43	75/104	44/61	.721154	$0x, 0y$ $31x, 44y$ $43x, 61y$
			→	
75/104	119/165	44/61	.721212	$0x, 0y$ $75x, 44y$ $104x, 61y$
			→	
119/165	163/226	44/61	.721239	$0x, 0y$ $119x, 44y$ $165x, 61y$
			→	
163/226	207/287	44/61	.721254	$0x, 0y$ $163x, 44y$ $226x, 61y$
			←	
163/226	370/513	207/287	.721248	$0x, 0y$ $163x, 207y$ $226x, 287y$
			←	
163/226	533/739	370/513	.721245	$0x, 0y$ $163x, 370y$ $226x, 513y$
			←	

$$G = (1 + G^7)^{\left(\frac{1}{9}\right)} = 1.16185205479 \dots$$

$$\rightarrow \text{Log}_2 \underline{.216426373898 \dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$	aN, e_y	bN, f_y
0	1	1	1.000000		$0N, 0y$	$0N, 1y$	$1N, 0y$
1	1	0		←			
0	1/2	1	.500000		$0N, 0y$	$0N, 1y$	$1N, 1y$
1	2	1		←			
0	1/3	1	.333333		$0N, 0y$	$0N, 1y$	$1N, 2y$
1	3	2		←			
0	1/4	1	.250000		$0N, 0y$	$0N, 1y$	$1N, 3y$
1	4	3		←			
0	1/5	1	.200000		$0N, 0y$	$0N, 1y$	$1N, 4y$
1	5	4		→			
1	2/9	1	.222222		$0N, 0y$	$1N, 1y$	$5N, 4y$
5	9	4		←			
1	3/14	2	.214286		$0N, 0y$	$1N, 2y$	$5N, 9y$
5	14	9		→			
3	5/23	2	.217391		$0N, 0y$	$3N, 2y$	$14N, 9y$
14	23	9		←			
3	8/37	5	.216216		$0N, 0y$	$3N, 5y$	$14N, 23y$
14	37	23		→			
8	13/60	5	.216667		$0N, 0y$	$8N, 5y$	$37N, 23y$
37	60	23		←			
8	21/97	13	.216495		$0N, 0y$	$8N, 13y$	$37N, 60y$
37	97	60		←			
8	29/134	21	.216418		$0N, 0y$	$8N, 21y$	$37N, 97y$
37	134	97		→			
29	50/231	21	.216450		$0N, 0y$	$29N, 21y$	$134N, 97y$
134	231	97		←			
29	79/365	50	.216438		$0N, 0y$	$29N, 50y$	$134N, 231y$
134	365	231		←			
29	108/499	79	.216433		$0N, 0y$	$29N, 79y$	$134N, 365y$
134	499	365		←			
29	137/633	108	.216430		$0N, 0y$	$29N, 108y$	$134N, 499y$
134	633	499		←			
29	166/767	137	.216428		$0N, 0y$	$29N, 137y$	$134N, 633y$
134	767	633		←			
	195/901			→			

$$2/G = 2 / (1 + G^7)^{1/9} = 1.72138956225 \dots$$

$$\rightarrow \text{Log}_2 \underline{.783573626102 \dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$			$0x, 0y$ a_n, e_y b_n, f_y
0	1	1	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
1	1	0		←	
0	1/2	1	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
1	2	1		→	
1	2/3	1	.666667		$0x, 0y$ $1x, 1y$ $2x, 1y$
2	3	1		→	
2	3/4	1	.750000		$0x, 0y$ $2x, 1y$ $3x, 1y$
3	4	1		→	
3	4/5	1	.800000		$0x, 0y$ $3x, 1y$ $4x, 1y$
4	5	1		←	
3	7/9	4	.777778		$0x, 0y$ $3x, 4y$ $4x, 5y$
4	9	5		→	
7	11/14	4	.785714		$0x, 0y$ $7x, 4y$ $9x, 5y$
9	14	5		←	
7	18/23	11	.782609		$0x, 0y$ $7x, 11y$ $9x, 14y$
9	23	14		→	
18	29/37	11	.783784		$0x, 0y$ $18x, 11y$ $23x, 14y$
23	37	14		←	
18	47/60	29	.783333		$0x, 0y$ $18x, 29y$ $23x, 37y$
23	60	37		→	
47	76/97	29	.783505		$0x, 0y$ $47x, 29y$ $60x, 37y$
60	97	37		→	
76	105/134	29	.783582		$0x, 0y$ $76x, 29y$ $97x, 37y$
97	134	37		←	
76	181/231	105	.783550		$0x, 0y$ $76x, 105y$ $97x, 134y$
97	231	134		→	
181	286/365	105	.783562		$0x, 0y$ $181x, 105y$ $231x, 134y$
231	365	134		→	
286	391/499	105	.783567		$0x, 0y$ $286x, 105y$ $365x, 134y$
365	499	134		→	
391	496/633	105	.783570		$0x, 0y$ $391x, 105y$ $499x, 134y$
499	633	134		→	

$$G = (1 + G^5)^{\frac{1}{5}} = 1.11925266658 \dots$$

$$\rightarrow \text{Log}_2 \quad \underline{.162535755416 \dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				←			
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
				←			
0	1	5	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
				←			
0	1	6	.142857		$0x, 0y$	$0x, 1y$	$1x, 6y$
				→			
1	2	1	.153846		$0x, 0y$	$1x, 1y$	$7x, 6y$
				→			
2	3	1	.157895		$0x, 0y$	$2x, 1y$	$13x, 6y$
				→			
3	4	1	.160000		$0x, 0y$	$3x, 1y$	$19x, 6y$
				→			
4	5	1	.161290		$0x, 0y$	$4x, 1y$	$25x, 6y$
				→			
5	6	1	.162162		$0x, 0y$	$5x, 1y$	$31x, 6y$
				→			
6	7	1	.162791		$0x, 0y$	$6x, 1y$	$37x, 6y$
				←			
6	13	7	.162500		$0x, 0y$	$6x, 7y$	$37x, 43y$
				→			
13	20	7	.162602		$0x, 0y$	$13x, 7y$	$80x, 43y$
				←			
13	33	20	.162562		$0x, 0y$	$13x, 20y$	$80x, 123y$
80	203	123					
46/283				←			

$$2/G = 2/(1+G^5)^{\frac{1}{5}} = 1.78690662057\dots$$

$$\rightarrow \text{Log}_2 \underline{.837464244584\dots}$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ ax, ey bx, fy
0/1	1/1	1/0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0/1	1/2	1/1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1/2	2/3	1/1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2/3	3/4	1/1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3/4	4/5	1/1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4/5	5/6	1/1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			→	
5/6	6/7	1/1	.857143	$0x, 0y$ $5x, 1y$ $6x, 1y$
			←	
5/6	11/13	6/7	.846154	$0x, 0y$ $5x, 6y$ $6x, 7y$
			←	
5/6	16/19	11/13	.842105	$0x, 0y$ $5x, 11y$ $6x, 13y$
			←	
5/6	21/25	16/19	.840000	$0x, 0y$ $5x, 16y$ $6x, 19y$
			←	
5/6	26/31	21/25	.838710	$0x, 0y$ $5x, 21y$ $6x, 25y$
			←	
5/6	31/37	26/31	.837838	$0x, 0y$ $5x, 26y$ $6x, 31y$
			←	
5/6	36/43	31/37	.837209	$0x, 0y$ $5x, 31y$ $6x, 37y$
			→	
36/43	67/80	31/37	.837500	$0x, 0y$ $36x, 31y$ $43x, 37y$
			←	
36/43	103/123	67/80	.837398	$0x, 0y$ $36x, 67y$ $43x, 80y$
			→	
103/123	170/203	67/80	.837438	$0x, 0y$ $103x, 67y$ $123x, 80y$
			→	

$$G = (1 + G^4)^{1/4} = 1.10735199067\dots$$

→ $\text{Log}_2 .147113880183\dots$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$	$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0	1/3	2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0	1/4	3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			←	
0	1/5	4	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
			←	
0	1/6	5	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
			←	
0	1/7	6	.142857	$0x, 0y$ $0x, 1y$ $1x, 6y$
			→	
1	2/13	6	.153846	$0x, 0y$ $1x, 1y$ $7x, 6y$
			←	
1	3/20	13	.150006	$0x, 0y$ $1x, 2y$ $7x, 13y$ ✓
			←	
1	4/27	20	.148148	$0x, 0y$ $1x, 3y$ $7x, 20y$ ✓
			←	
1	5/34	27	.147059	$0x, 0y$ $1x, 4y$ $7x, 27y$
			→	
5	9/61	27	.147541	$0x, 0y$ $5x, 4y$ $34x, 27y$
			←	
5.19	5/34	14/95	.147368	$0x, 0y$ $5x, 9y$ $34x, 61y$
			←	
3.43	5/34	19/95	.147287	$0x, 0y$ $5x, 14y$ $34x, 95y$
			←	
	5/34	24/129	.147239	$0x, 0y$ $5x, 19y$ $34x, 129y$
			←	
	5/34	29/163	.147208	$0x, 0y$ $5x, 24y$ $34x, 163y$
			←	
	etc	14 places		

$$2/G = 2/(1+G^4)^{1/9} = 1.80611044803\dots$$

$$\rightarrow \text{Log}_2 \underline{.852886119817\dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
b	d	f			$0x, 0y$ a^x, e^y b^x, f^y
0	1	0	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
				←	
0	1	1	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
				→	
1	2	1	.666667		$0x, 0y$ $1x, 1y$ $2x, 1y$
				→	
2	3	1	.750000		$0x, 0y$ $2x, 1y$ $3x, 1y$
				→	
3	4	1	.800000		$0x, 0y$ $3x, 1y$ $4x, 1y$
				→	
4	5	1	.833333		$0x, 0y$ $4x, 1y$ $5x, 1y$
				→	
5	6	1	.857143		$0x, 0y$ $5x, 1y$ $6x, 1y$
				←	
5	6	11	.846154		$0x, 0y$ $5x, 6y$ $6x, 7y$
				→	
11	13	17	.850000		$0x, 0y$ $11x, 6y$ $13x, 7y$
				→	
17	20	23	.851852		$0x, 0y$ $17x, 6y$ $20x, 7y$
				→	
23	27	29	.852941		$0x, 0y$ $23x, 6y$ $27x, 7y$
				←	
23	27	52	.852459		$0x, 0y$ $23x, 29y$ $27x, 34y$
				→	
52	61	81	.852632		$0x, 0y$ $52x, 29y$ $61x, 34y$
				→	
81	95	110	.852713		$0x, 0y$ $81x, 29y$ $95x, 34y$
				→	
110	129	139	.852761		$0x, 0y$ $110x, 29y$ $129x, 34y$
				→	
139	163	168	.852792		$0x, 0y$ $139x, 29y$ $163x, 34y$
				→	

$$G = (1+G^2)^{\frac{1}{9}} = 1.09102447048\dots$$

$$\rightarrow \text{Log}_2 .125683460089\dots$$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$0x, 0y$ ax, ey bx, fy
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	2	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0	1	3	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0	1	4	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			←	
0	1	5	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
			←	
0	1	6	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
			←	
0	1	7	.142857	$0x, 0y$ $0x, 1y$ $1x, 6y$
			←	
0	1	8	.125000	$0x, 0y$ $0x, 1y$ $1x, 7y$
			→	
1	8	7	.133333	$0x, 0y$ $1x, 1y$ $8x, 7y$
			←	
1	8	15	.130435	$0x, 0y$ $1x, 2y$ $8x, 15y$
			←	↳ new
1	8	23	.129032	$0x, 0y$ $1x, 3y$ $8x, 23y$
			←	↳ new
1	8	31	.128205	$0x, 0y$ $1x, 4y$ $8x, 31y$
			←	
1	8	39	.127660	$0x, 0y$ $1x, 5y$ $8x, 39y$
			←	
1	8	47	.127273	$0x, 0y$ $1x, 6y$ $8x, 47y$
			←	
1	8	55	.126980	$0x, 0y$ $1x, 7y$ $8x, 55y$
			←	
1	8	63	.126761	$0x, 0y$ $1x, 8y$ $8x, 63y$
			←	

$$2/G = 2/(1+G^2)^{(\frac{1}{9})} = 1.83313945206\dots$$

$$\text{Log}_2 \underline{.874316539911\dots}$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave $0x, 0y$ a_x, e_y b_x, f_y
0	1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			→	
5	6/7	1	.857143	$0x, 0y$ $5x, 1y$ $6x, 1y$
			→	
6	7/8	1	.875000	$0x, 0y$ $6x, 1y$ $7x, 1y$
			←	
6	13/15	7	.866667	$0x, 0y$ $6x, 7y$ $7x, 8y$
			→	
13	20/23	7	.869565	$0x, 0y$ $13x, 7y$ $15x, 8y$
			→	
20	27/31	7	.870968	$0x, 0y$ $20x, 7y$ $23x, 8y$
			→	
27	34/39	7	.871795	$0x, 0y$ $27x, 7y$ $31x, 8y$
			→	
34	41/47	7	.872340	$0x, 0y$ $34x, 7y$ $39x, 8y$
			→	
41	48/55	7	.872727	$0x, 0y$ $41x, 7y$ $47x, 8y$
			→	
48	55/63	7	.873016	$0x, 0y$ $48x, 7y$ $55x, 8y$
			→	
55	62/71	7	.873239	$0x, 0y$ $55x, 7y$ $63x, 8y$
			→	

$$G = (1+G)^{\frac{1}{9}} = 1.08507024549\dots$$

$$\log_2 .117788443167\dots$$

a	c	e	c	Root Generator Octave
b	d	f	d dec.	$0n, 0y$ a_n, e_y b_n, f_y
0	1	0	1.000000	$0n, 0y$ $0n, 1y$ $1n, 0y$
			←	
0	1	1	.500000	$0n, 0y$ $0n, 1y$ $1n, 1y$
			←	
0	1	2	.333333	$0n, 0y$ $0n, 1y$ $1n, 2y$
			←	
0	1	3	.250000	$0n, 0y$ $0n, 1y$ $1n, 3y$
0/1	1/5	1/4	.200000	$0n, 0y$ $0n, 1y$ $1n, 4y$
			←	
0	1	5	.166667	$0n, 0y$ $0n, 1y$ $1n, 5y$
			←	
0	1	6	.142857	$0n, 0y$ $0n, 1y$ $1n, 6y$
			←	
0	1	7	.125000	$0n, 0y$ $0n, 1y$ $1n, 7y$
			←	
0	1	8	.111111	$0n, 0y$ $0n, 1y$ $1n, 8y$
			→	
1	2	1	.117647	$0n, 0y$ $1n, 1y$ $9n, 8y$
			→	
2	3	1	.120000	$0n, 0y$ $2n, 1y$ $17n, 8y$
			←	
2	5	3	.119048	$0n, 0y$ $2n, 3y$ $17n, 25y$
			←	
2	7	5	.118644	$0n, 0y$ <u>$2n, 5y$</u> $17n, 42y$
			←	
2	9	7	.118421	$0n, 0y$ $2n, 7y$ $17n, 59y$
			←	
2	11	9	.118280	$0n, 0y$ $2n, 9y$ $17n, 76y$
			←	
2	13	11	.118182	$0n, 0y$ $2n, 11y$ $17n, 93y$
			←	
2	15	13	.118110	$0n, 0y$ $2n, 13y$ $17n, 110y$
			←	
			see $49/416$ 24 places ←	

3.31

22.5

$$2/G = 2/(1+G)^{\frac{1}{9}} = 1.84319863927\dots$$

$$\rightarrow \log_2 .882211556833\dots$$

a	c	e	c	Root Generator Octave
<u>b</u>	<u>d</u>	<u>f</u>	<u>d</u> dec.	<u>0x, 0y</u> <u>a_x, e_y</u> <u>b_x, f_y</u>
0	1	1	1.000000	0 _x , 0 _y 0 _x , 1 _y 1 _x , 0 _y
←				
0	1	1	.500000	0 _x , 0 _y 0 _x , 1 _y 1 _x , 1 _y
→				
1	2	1	.666667	0 _x , 0 _y 1 _x , 1 _y 2 _x , 1 _y
→				
2	3	1	.750000	0 _x , 0 _y 2 _x , 1 _y 3 _x , 1 _y
→				
3	4	1	.800000	0 _x , 0 _y 3 _x , 1 _y 4 _x , 1 _y
→				
4	5	1	.833333	0 _x , 0 _y 4 _x , 1 _y 5 _x , 1 _y
→				
5	6	1	.857143	0 _x , 0 _y 5 _x , 1 _y 6 _x , 1 _y
→				
6	7	1	.875000	0 _x , 0 _y 6 _x , 1 _y 7 _x , 1 _y
→				
7	8	1	.888889	0 _x , 0 _y 7 _x , 1 _y 8 _x , 1 _y
←				
7	15	8	.882353	0 _x , 0 _y 7 _x , 8 _y 8 _x , 9 _y
←				
7	22	15	.880000	0 _x , 0 _y 7 _x , 15 _y 8 _x , 17 _y
→				
22	37	15	.880952	0 _x , 0 _y 22 _x , 15 _y 25 _x , 17 _y
→				
37	52	15	.881356	0 _x , 0 _y 37 _x , 15 _y 42 _x , 17 _y
→				
52	67	15	.881579	0 _x , 0 _y 52 _x , 15 _y 59 _x , 17 _y
→				
67	82	15	.881720	0 _x , 0 _y 67 _x , 15 _y 76 _x , 17 _y
→				
82	97	15	.881818	0 _x , 0 _y 82 _x , 15 _y 93 _x , 17 _y
→				

✓ new

3.31

$$G = (1 + G^9)^{\frac{1}{10}} = 1.19749143357\dots$$

$$\rightarrow \text{Log}_2 \underline{.260015335468\dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				→			
1	2	3	.285714		$0x, 0y$	$1x, 1y$	$4x, 3y$
				←			
1	3	7	.272727		$0x, 0y$	$1x, 2y$	$4x, 7y$
				←			
1	4	11	.266667		$0x, 0y$	$1x, 3y$	$4x, 11y$
				←			
1	5	15	.263158		$0x, 0y$	$1x, 4y$	$4x, 15y$
				←			
1	6	19	.260870		$0x, 0y$	$1x, 5y$	$4x, 19y$
				←			
1	7	23	.259259		$0x, 0y$	$1x, 6y$	$4x, 23y$
				→			
7	13	6	.260000		$0x, 0y$	$7x, 6y$	$27x, 23y$
				→			
13	19	6	.260274		$0x, 0y$	$13x, 6y$	$50x, 23y$
				←			
13	32	19	.260163		$0x, 0y$	$13x, 19y$	$50x, 73y$
				←			
13	45	32	.260116		$0x, 0y$	$13x, 32y$	$50x, 123y$
				←			
13	58	45	.260090		$0x, 0y$	$13x, 45y$	$50x, 173y$
				←			
13	71	58	.260073		$0x, 0y$	$13x, 58y$	$50x, 223y$
				←			
etc				←			

$$2/G = 2/(1+G^9)^{(\frac{1}{10})} = 1.67015808542\dots$$

$$\rightarrow \text{Log}_2 .739984664532\dots$$

a	c	e	c	dec	Root Generator Octave
b	d	f	d		$0n, 0y$ a_n, e_y b_n, f_y
0	1	1	1.000000		$0n, 0y$ $0n, 1y$ $1n, 0y$
			←		
0	1/2	1	.500000		$0n, 0y$ $0n, 1y$ $1n, 1y$
			→		
1	2/3	1	.666667		$0n, 0y$ $1n, 1y$ $2n, 1y$
			→		
2	3/4	1	.750000		$0n, 0y$ $2n, 1y$ $3n, 1y$
			←		
2	5/7	3/4	.714286		$0n, 0y$ $2n, 3y$ $3n, 4y$
			→		
5	8/11	3/4	.727273		$0n, 0y$ $5n, 3y$ $7n, 4y$
			→		
8	11/15	3/4	.733333		$0n, 0y$ $8n, 3y$ $11n, 4y$
			→		
11	14/19	3/4	.736842		$0n, 0y$ $11n, 3y$ $15n, 4y$
			→		
14	17/23	3/4	.739130		$0n, 0y$ $14n, 3y$ $19n, 4y$
			→		
17	20/27	3/4	.740741		$0n, 0y$ $17n, 3y$ $23n, 4y$
			←		
17	37/50	20/27	.740000		$0n, 0y$ $17n, 20y$ $23n, 27y$
			←		
17	54/73	37/50	.739726		$0n, 0y$ $17n, 37y$ $23n, 50y$
			→		
54	91/123	37/50	.739837		$0n, 0y$ $54n, 37y$ $73n, 50y$
			→		
91	128/173	37/50	.739884		$0n, 0y$ $91n, 37y$ $123n, 50y$
			→		
128	165/223	37/50	.739910		$0n, 0y$ $128n, 37y$ $173n, 50y$
			→		
165	202/273	37/50	.739927		$0n, 0y$ $165n, 37y$ $223n, 50y$
			→		

$$G = (1 + G^7)^{\frac{1}{10}} = 1.13588834613 \dots$$

$$\log_2 .183821029912 \dots$$

a	c	e	c	dec.	Root	Generator	Octave
b	d	f	d		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	0	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
			←				
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
			←				
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
			←				
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
			←				
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
			←				
0	1	5	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
			→				
1	2	1	.181818		$0x, 0y$	$1x, 1y$	$6x, 5y$
			→				
2	3	1	.187500		$0x, 0y$	$2x, 1y$	$11x, 5y$
			←				
2	5	3	.185185		$0x, 0y$	$2x, 3y$	$11x, 16y$
			←				
2	7	5	.184211		$0x, 0y$	<u>$2x, 5y$</u>	$11x, 27y$
			←				
2	9	7	.183673		$0x, 0y$	$2x, 7y$	$11x, 38y$
			→				
9	16	7	.183908		$0x, 0y$	$9x, 7y$	$49x, 38y$
			←				
9	25	16	.183824		$0x, 0y$	$9x, 16y$	$49x, 87y$
			←				
9	34	25	.183784		$0x, 0y$	$9x, 25y$	$49x, 136y$
			→				
34	59	25	.183801		$0x, 0y$	$34x, 25y$	$185x, 136y$
			→				
59	84	25	.183807		$0x, 0y$	$59x, 25y$	$321x, 136y$
			→				
			21 places etc →				

$$2/G = 2/(1+G^7)^{1/7} = 1.76073643753\dots$$

$$\rightarrow \text{Log}_2 \underline{.816178970088\dots}$$

a	c	e	c	Root Generator Octave
b	d	f	d dec.	$0x, 0y$ a^x, e^y b^x, f^y
0	1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			←	
4	9/11	5	.818182	$0x, 0y$ $4x, 5y$ $5x, 6y$
			←	
4	13/16	9	.812500	$0x, 0y$ $4x, 9y$ $5x, 11y$
			→	
13	22/27	9	.814815	$0x, 0y$ $13x, 9y$ $16x, 11y$
			→	
22	31/38	9	.815789	$0x, 0y$ $22x, 9y$ $27x, 11y$
			→	
31	40/49	9	.816327	$0x, 0y$ $31x, 9y$ $38x, 11y$
			←	
31	71/87	40	.816092	$0x, 0y$ $31x, 40y$ $38x, 49y$
			→	
71	111/136	40	.816176	$0x, 0y$ $71x, 40y$ $87x, 49y$
			→	
111	151/185	40	.816216	$0x, 0y$ $111x, 40y$ $136x, 49y$
			←	
111	262/321	151	.816199	$0x, 0y$ $111x, 151y$ $136x, 185y$
			←	
111	373/457	262	.816193	$0x, 0y$ $111x, 262y$ $136x, 321y$
			←	

$$G = (1 + G^3)^{\frac{1}{10}} = 1.08593791264 \dots$$

$$\rightarrow \log_2 .118941620926 \dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave
$0x, 0y$	a_n, e_y	b_n, f_y		
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	2	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			←	
0	1	3	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
			←	
0	1	4	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
			←	
0	1	5	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
			←	
0	1	6	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
			←	
0	1	7	.142857	$0x, 0y$ $0x, 1y$ $1x, 6y$
			←	
0	1	8	.125000	$0x, 0y$ $0x, 1y$ $1x, 7y$
			←	
0	1	9	.111111	$0x, 0y$ $0x, 1y$ $1x, 8y$
			→	
1	2	1	.117647	$0x, 0y$ $1x, 1y$ $9x, 8y$
			→	
2	3	1	.120000	$0x, 0y$ $2x, 1y$ $17x, 8y$
			←	
2	5	3	.119048	$0x, 0y$ $2x, 3y$ $17x, 25y$
			←	
2	7	5	.118644	$0x, 0y$ $2x, 5y$ $17x, 42y$
			→	
7	12	5	.118812	$0x, 0y$ $7x, 5y$ $59x, 42y$
			→	
12	17	5	.118881	$0x, 0y$ $12x, 5y$ $101x, 42y$
			→	
17	22	5	.118919	$0x, 0y$ $17x, 5y$ $143x, 42y$
			→	
22	27	5	.118943	$0x, 0y$ $22x, 5y$ $185x, 42y$
			←	
	49			
	412			

$$2/G = 2/(1+G^3) \left(\frac{1}{10}\right) = 1.84172591888 \dots$$

$$\rightarrow \text{Log}_2 .881058379074 \dots$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
b	d	f			$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
				←	
0	1	2	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
				→	
1	2	3	.666667		$0x, 0y$ $1x, 1y$ $2x, 1y$
				→	
2	3	4	.750000		$0x, 0y$ $2x, 1y$ $3x, 1y$
				→	
3	4	5	.800000		$0x, 0y$ $3x, 1y$ $4x, 1y$
				→	
4	5	6	.833333		$0x, 0y$ $4x, 1y$ $5x, 1y$
				→	
5	6	7	.857143		$0x, 0y$ $5x, 1y$ $6x, 1y$
				→	
6	7	8	.875000		$0x, 0y$ $6x, 1y$ $7x, 1y$
				→	
7	8	9	.888889		$0x, 0y$ $7x, 1y$ $8x, 1y$
				←	
7	15	8	.882353		$0x, 0y$ $7x, 8y$ $8x, 9y$
8	17	9			
				←	
7	22	15	.880000		$0x, 0y$ $7x, 15y$ $8x, 17y$
8	25	17			
				→	
22	37	15	.880952		$0x, 0y$ $22x, 15y$ $25x, 17y$
25	42	17			
				→	
37	52	15	.881356		$0x, 0y$ $37x, 15y$ $42x, 17y$
42	59	17			
				←	
37	89	52	.881188		$0x, 0y$ $37x, 52y$ $42x, 59y$
42	101	59			
				←	
37	126	89	.881119		$0x, 0y$ $37x, 89y$ $42x, 101y$
42	143	101			
				←	
37	163	126	.881081		$0x, 0y$ $37x, 126y$ $42x, 143y$
42	185	143			
				←	
37	200	163	.881057		$0x, 0y$ $37x, 163y$ $42x, 185y$
42	227	185			
				→	

$$G = (1+G)^{\left(\frac{1}{10}\right)} = 1.07576606609, \dots$$

$$\rightarrow \text{Log}_2 .105364386459, \dots$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
b	d	f			$0x, 0y$ a_x, e_y b_x, f_y
0	1	1	0	.894636	$0x, 0y$ $0x, 1y$ $1x, 0y$
				←	
0	1	2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
				←	
0	1	3	2	.333333	$0x, 0y$ $0x, 1y$ $1x, 2y$
				←	
0	1	4	3	.250000	$0x, 0y$ $0x, 1y$ $1x, 3y$
				←	
0	1	5	4	.200000	$0x, 0y$ $0x, 1y$ $1x, 4y$
				←	
0	1	6	5	.166667	$0x, 0y$ $0x, 1y$ $1x, 5y$
				←	
0	1	7	6	.142857	$0x, 0y$ $0x, 1y$ $1x, 6y$
0/1	1/8	1/7		.125000	$0x, 0y$ $0x, 1y$ $1x, 7y$
				←	
0	1	9	8	.111111	$0x, 0y$ $0x, 1y$ $1x, 8y$
				←	
0	1	10	9	.100000	$0x, 0y$ $0x, 1y$ $1x, 9y$
				→	
1	2	1	9	.105263	$0x, 0y$ $1x, 1y$ $10x, 9y$
				→	
2	3	1	9	.107143	$0x, 0y$ $2x, 1y$ $19x, 9y$
				←	
2	5	3	28	.106383	$0x, 0y$ $2x, 3y$ $19x, 28y$
				←	
2	7	5	47	.106061	$0x, 0y$ $2x, 5y$ $19x, 47y$
				←	
2	9	7	66	.105882	$0x, 0y$ $2x, 7y$ $19x, 66y$
				←	
2	11	9	85	.105769	$0x, 0y$ $2x, 9y$ $19x, 85y$
				←	
2	13	11	104	.105691	$0x, 0y$ $2x, 11y$ $19x, 104y$
				←	
				26 places etc. ←	

$$2/G = 2/(1+G)^{(\frac{1}{10})} = 1.85914025646\dots$$

$$\rightarrow \log_2 .894635613541\dots$$

$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$ dec.	Root Generator Octave
$0x, 0y$	ax, ey	bx, fy		
0	1	0	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
←				
0	1/2	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
→				
1	2/3	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
→				
2	3/4	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
→				
3	4/5	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
→				
4	5/6	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
→				
5	6/7	1	.857143	$0x, 0y$ $5x, 1y$ $6x, 1y$
→				
6	7/8	1	.875000	$0x, 0y$ $6x, 1y$ $7x, 1y$
→				
7	8/9	1	.888889	$0x, 0y$ $7x, 1y$ $8x, 1y$
→				
8	9/10	1	.900000	$0x, 0y$ $8x, 1y$ $9x, 1y$
←				
8	17/19	9	.894737	$0x, 0y$ $8x, 9y$ $9x, 10y$
←				
8	25/28	17	.892857	$0x, 0y$ $8x, 17y$ $9x, 19y$
→				← new!
25	42/47	17	.893617	$0x, 0y$ $25x, 17y$ $28x, 19y$
→				
42	59/66	17	.893939	$0x, 0y$ $42x, 17y$ $47x, 19y$
→				
59	76/85	17	.894118	$0x, 0y$ $59x, 17y$ $66x, 19y$
→				
76	93/104	17	.894231	$0x, 0y$ $76x, 17y$ $85x, 19y$
→				

$9x.415037499275... = 3.73533749348...$

$5/3 = 1.666666..., \log_2 = .736965594169...$

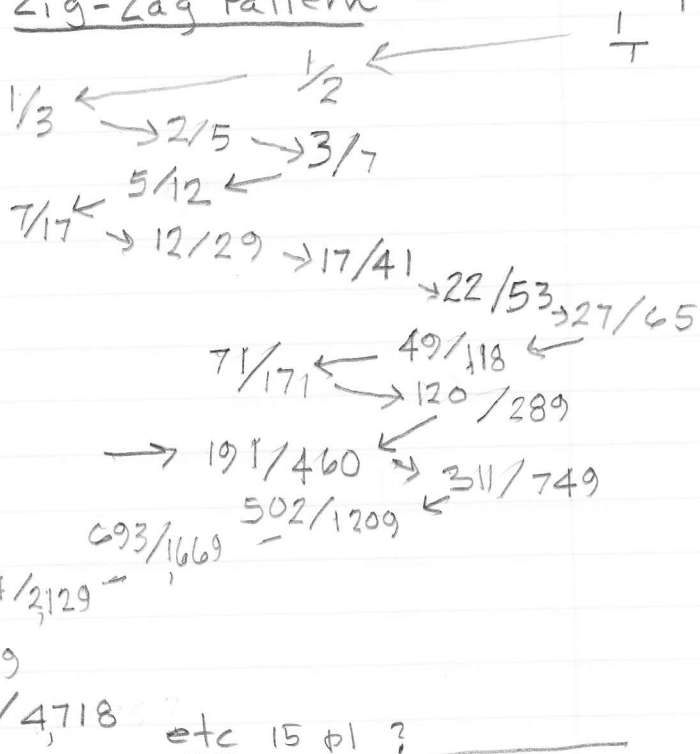
$(\frac{8}{1} \times \frac{5}{3})^{\frac{1}{9}} = \sqrt[9]{\frac{40}{3}} = 1.33350053098...$

$\log_2 = .415218399348...$

1/4 Pattern

Zig-Zag Pattern

	←	0	.415218
←	2		.408
→	2		.448
←	2		.229
→	4		.378
←	2		.643
→	1		.554
←	1		.802
→	1		.246
←	4		.059
→	16		.686



~~128~~ $\frac{3}{40}$

~~$(\frac{64}{3})^{\frac{1}{9}}$~~
 $\frac{3}{40}$

$(32 \times \frac{6}{5})^{\frac{1}{9}} = \sqrt[9]{\frac{192}{5}} = 1.49981192623...$

Scrap Do This
DONE

28 May 00 EW

$$\left(\frac{3}{2}\right)^9 = 38.4433593750 \dots$$

$$\log_2 = 5.26466250648 \dots$$

$$\rightarrow \sqrt[9]{40} = 1.50663019029$$

$$\log_2 = \underline{.591325343871 \dots}$$

W Pattern

$$\leftarrow 1 .691 \quad \frac{0}{1}$$

$$\rightarrow 1 .446$$

$$\leftarrow 2 .237$$

$$\rightarrow 4 .211$$

$$\leftarrow 4 .736$$

$$\rightarrow 1 .358$$

$$\leftarrow 2 .792$$

$$\rightarrow 1 .261$$

$$\leftarrow 3 .823$$

$$1 .214$$

$$\rightarrow 1227/2075$$

$$968/1637$$

$$709/1199$$

$$2195/3712$$

$$450/761$$

$$259/438$$

$$191/323$$

$$123/208$$

$$68/115$$

$$55/93$$

$$42/71$$

$$29/49$$

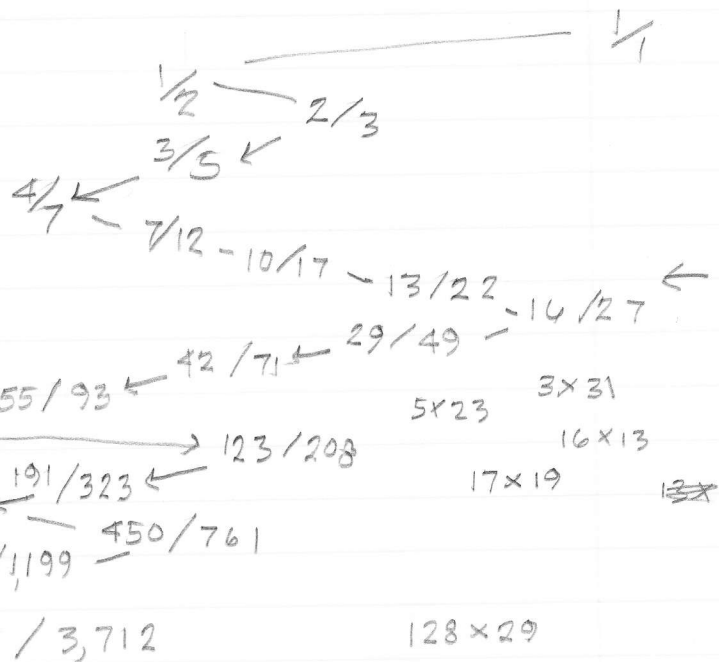
$$5 \times 23$$

$$3 \times 31$$

$$17 \times 19$$

$$16 \times 13$$

~~13x~~



$$\sqrt[2]{64/5} = 1.32746576624 \checkmark$$

Complement

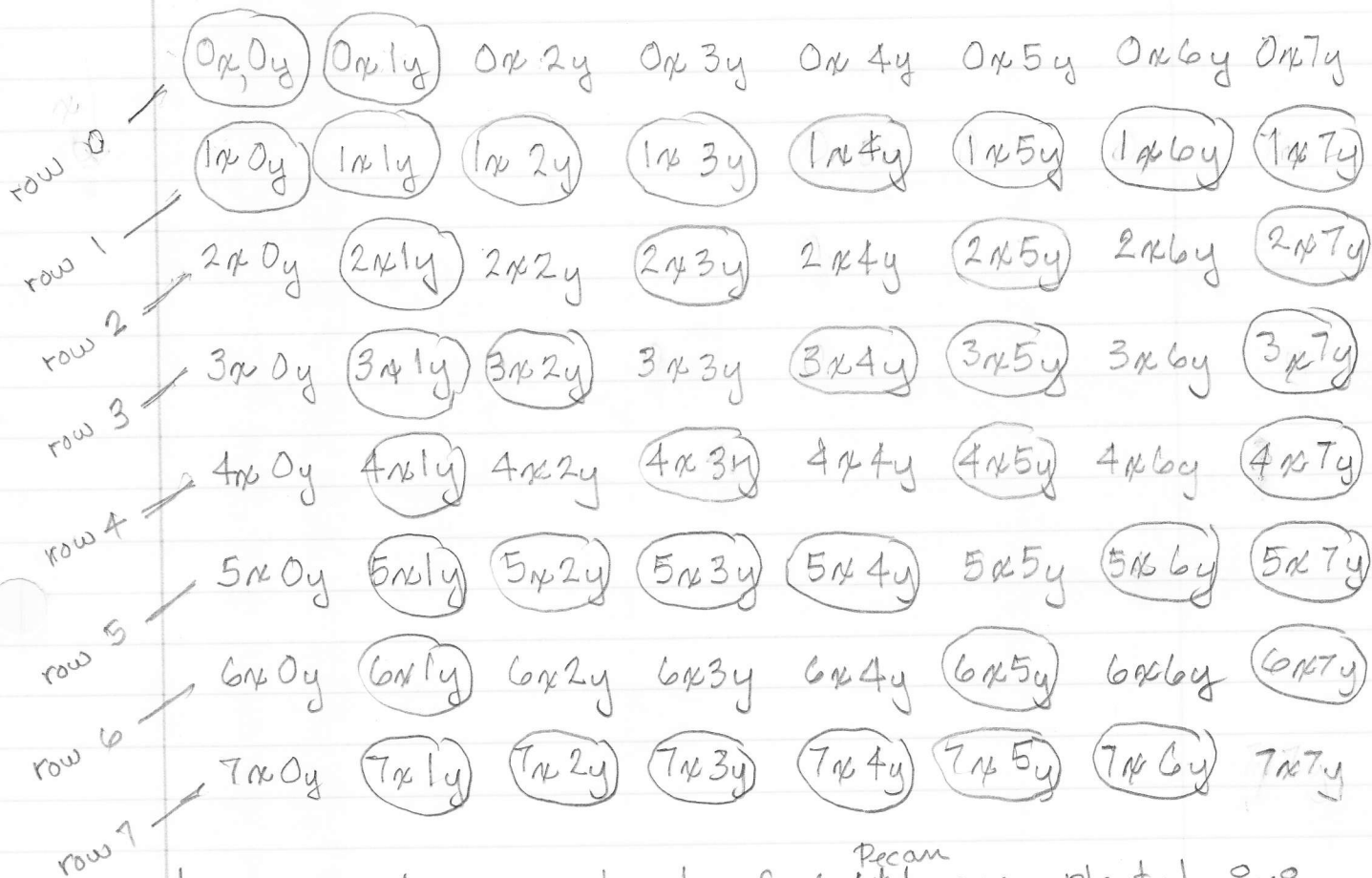
$$\log_2 = .408674656129 \checkmark$$

Pecan-Tree Patterns, In a Nut-Shell

①

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Fig. 1 Biaxial Co-prime Patterns



If we are in an orchard of ^{Pecan} 64 trees planted 8x8 as shown and we stand at Tree "0x0y" and sight thru the orchard, the trees we can actually see are shown in the circles. They form the co-prime pattern, which extended endlessly never exactly repeats itself, but is nonetheless precisely determined. This pattern is described in the ScaleTree/Peirce Series/Stern-Brocot Series, as it is likewise found in the Lambdoma/Farey Series. Variations on this pattern are found thruout nature, the arts, the sciences, and in many surprisingly unexpected places. Interesting and diverse applications are found in musical scales and their associated keyboards. 22 June 2000EW

June 26, 2000

List of Papers sent to; Gary David

Dr. Brian Hayes

Dr. Divakar Viswanath

Item

1. Scale Tree (Peirce Sequence), 1994 Erv Wilson, 32pp
2. Excerpt, Collected Papers of Charles Sanders Peirce, 1909
edited Charles Hartshorne, 8 pages
3. Annotated Excerpt, The Boscawnetian 7-rank Keyboard, 1974, 1977, Wilson, 1 page
4. { Scale-Tree (Peirce Sequence to State 6) Wilson, 1996 1 page
Epimore Tree, Wilson, 1996, Staped Overlay 1 page
5. So-called Farey Series, extended $\frac{9}{1}$ to $\frac{1}{10}$, (Full Set of Gear Ratios) and Lambdaoma, 1996, Wilson 21 sheets
6. The Scales of Mt. Meru, 1993, Wilson, 18 pages

More follows shortly - . Suggest you look at the wilson file on www.anaphoria.com

Best regards,

Erwin M. Wilson

ERVIN M. WILSON

844 N. Ave 65

Los Angeles, CA 90042-1541

Phone (323) 256-2624

P.S.

7. The Harmonic Series as logarithmic Spiral 1965, Wilson 2 sh
E.W.

Zig-Zag Series (1←, 1→), Limit Kornerup's Golden Fifth $\frac{c}{d}$

\log_2 , .580178728 295

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Sheet 1 of 2

27 JUL 2000 E.W.

a	c	e	$\frac{c}{d}$ dec
b	d	f	
1	$\frac{3}{5}$	$\frac{2}{3}$.600000
2	$\frac{4}{7}$	$\frac{3}{5}$	← .571429
4	$\frac{7}{12}$	$\frac{3}{5}$	→ .583333
7			←
4	$\frac{11}{19}$	$\frac{7}{12}$	.578947
7			→
11	$\frac{18}{31}$	$\frac{7}{12}$	.580645
19			←
11	$\frac{29}{50}$	$\frac{18}{31}$	.580000
19			→
29	$\frac{47}{81}$	$\frac{18}{31}$	.580247
50			←
29	$\frac{76}{131}$	$\frac{47}{81}$	.580153
50			→
76	$\frac{123}{212}$	$\frac{47}{81}$	.580189
131			←
76	$\frac{199}{343}$	$\frac{123}{212}$	.580175
131			→
199	$\frac{322}{555}$	$\frac{123}{212}$	.580180
343			←
199	$\frac{521}{898}$	$\frac{322}{555}$	.5801782
343			→
521	$\frac{843}{1453}$	$\frac{322}{555}$	.5801789
898			←
521	$\frac{1,364}{2,351}$	$\frac{843}{1453}$	.5801786
898			→
1,364	$\frac{2,207}{3,804}$	$\frac{843}{1453}$	.5801788
2,351			←
1,364	$\frac{3,571}{6,155}$	$\frac{2,207}{3,804}$	.5801787
2,351			

Ref: Acoustic Methods of Work, Thorvald Kornerup, 1934
 A Theory of Evolving Tonality, Joseph Yasser, 1932
 Diophantine Triplets and K, y Coordinates, Ervin M. Wilson, 2000

Zig-Zag Series ($1 \rightarrow, 1 \leftarrow$), Limit Kornerup's Golden Fourth $\frac{c}{d}$

\log_2 , .419821271705 ©2000 by Ervin M. Wilson, all rights reserved.

Sheet 2.

27 Jul 2000 · EW

a	c	e	$\frac{c}{d}$ dec
b	d	f	
1	2	1	.400000
3	5	2	→
2	3	1	.428571
5	7	2	←
2	5	3	.416667
5	12	7	→
5	8	3	.421053
12	19	7	←
5	13	8	.419355
12	31	19	→
13	21	8	.420000
31	50	19	←
13	34	21	.419753
31	81	50	→
34	55	21	.419847
81	131	50	←
34	89	55	.419811
81	212	131	→
89	144	55	.419825
212	343	131	←
89	233	144	.419820
212	555	343	→
233	377	144	.4198218
555	898	343	←
233	610	377	.4198211
555	1453	898	→
610	987	377	.4198214
1453	2351	898	←
610	1597	987	.41982124
1453	3804	2351	→
1597	2584	987	.41982128
3804	6155	2351	

Feininger Cactus Series

$\log_2 - .177998211118 \dots$

a	c	e	c	
b	d	f	d	decimal

1	2	1		
6	11	5		.181818

←

1	3	2		
6	17	11		.176471

→

3	5	2		
17	28	11		.178571

←

3	8	5		
17	45	28		.177778

→

8	13	5		
45	73	28		.178082

←

8	21	13		
45	118	73		.177966

→

21	34	13		
118	191	73		.178010

←

21	55	34		
118	309	191		.1779947

→

55	89	34		
309	500	191		.1780000

←

55	144	89		
309	809	500		.17799753

→

144	233	89		
809	1309	500		.17799847

←

144	377	233		
809	2118	1309		.177998111

→

377	610	233		
2118	3427	1309		.177998249

←

377	987	610		
2118	5545	3427		.177998197

→

987	1597	610		
5545	8972	3427		.1779982167

←

987	2584	1597		
5545	14517	8972		.177998209

→

2584	4181	1597		
14517	23489	8972		.177998212

$\frac{1\phi + 0}{5\phi + 1}$, $\text{anti}\log_2 = 1.13131306006\dots$, Feininger Cactus series sheet 1

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$\log_2 .177998211118\dots$

a	c	e	c	Root	Generator	Octave
b	d	f	d dec.	$0x, 0y$	$a/x, e/y$	$b/x, f/y$
0	1	1	1.000000	$0x, 0y$	$0x, 1y$	$1x, 0y$
			←			
0	1	1	.500000	$0x, 0y$	$0x, 1y$	$1x, 1y$
			←			
0	1	2	.333333	$0x, 0y$	$0x, 1y$	$1x, 2y$
			←			
0	1	3	.250000	$0x, 0y$	$0x, 1y$	$1x, 3y$
			←			
0	1	4	.200000	$0x, 0y$	$0x, 1y$	$1x, 4y$
			←			
0	1	5	.166667	$0x, 0y$	$0x, 1y$	$1x, 5y$
			→			
1	2	5	.181818	$0x, 0y$	$1x, 1y$	$6x, 5y$
			←			
1	3	11	.176471	$0x, 0y$	$1x, 2y$	$6x, 11y$
			→			
3	5	11	.178571	$0x, 0y$	$3x, 2y$	$17x, 11y$
			←			
3	8	28	.177778	$0x, 0y$	$3x, 5y$	$17x, 28y$
			→			
8	13	28	.178082	$0x, 0y$	$8x, 5y$	$45x, 28y$
			←			
8	21	73	.177966	$0x, 0y$	$8x, 13y$	$45x, 73y$
			→			
21	34	73	.178010	$0x, 0y$	$21x, 13y$	$118x, 73y$
			←			
21	55	191	.177994	$0x, 0y$	$21x, 34y$	$118x, 191y$
			→			
55	89	191	.178000	$0x, 0y$	$55x, 34y$	$309x, 191y$
			←			
55	144	500	.177998	$0x, 0y$	$55x, 89y$	$309x, 500y$
			→			
144	233	500	.177998	$0x, 0y$	$144x, 89y$	$809x, 500y$

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$\log_2 = .822001788882\dots$

a	c	e	c	Root Generator Octave
b	d	f	d dec.	$0x, 0y$ a_n, e_y b_n, f_y
0	1	1	1.000000	$0x, 0y$ $0x, 1y$ $1x, 0y$
			←	
0	1	1	.500000	$0x, 0y$ $0x, 1y$ $1x, 1y$
			→	
1	2	1	.666667	$0x, 0y$ $1x, 1y$ $2x, 1y$
			→	
2	3	1	.750000	$0x, 0y$ $2x, 1y$ $3x, 1y$
			→	
3	4	1	.800000	$0x, 0y$ $3x, 1y$ $4x, 1y$
			→	
4	5	1	.833333	$0x, 0y$ $4x, 1y$ $5x, 1y$
			←	
4	9	5	.818182	$0x, 0y$ $4x, 5y$ $5x, 6y$
			→	
9	14	5	.823529	$0x, 0y$ $9x, 5y$ $11x, 6y$
			←	
9	23	14	.821429	$0x, 0y$ $9x, 14y$ $11x, 17y$
			→	
23	37	14	.822222	$0x, 0y$ $23x, 14y$ $28x, 17y$
			←	
23	60	37	.821918	$0x, 0y$ $23x, 37y$ $28x, 45y$
			→	
60	97	37	.822034	$0x, 0y$ $60x, 37y$ $73x, 45y$
			←	
60	157	97	.821990	$0x, 0y$ $60x, 97y$ $73x, 118y$
			→	
157	254	97	.822006	$0x, 0y$ $157x, 97y$ $191x, 118y$
			←	
157	411	254	.822000	$0x, 0y$ $157x, 254y$ $191x, 309y$
			→	
411	665	254	.822002	$0x, 0y$ $411x, 254y$ $500x, 309y$
			←	
411	1076	665	.822002	$0x, 0y$ $411x, 665y$ $500x, 809y$

$$2^{\left(\frac{7}{72}\right)} = 1.06971184581\dots$$

$$\rightarrow \text{Log}_2 \underline{.0972222222\dots}$$

a	c	e	$\frac{c}{d}$	dec.	Root	Generator	Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$	$\frac{c}{d}$		$0x, 0y$	a_x, e_y	b_x, f_y
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
				←			
0	1	2	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
				←			
0	1	3	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
				←			
0	1	4	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
				←			
0	1	5	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
				←			
0	1	6	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
				←			
0	1	7	.142857		$0x, 0y$	$0x, 1y$	$1x, 6y$
				←			
0	1	8	.125000		$0x, 0y$	$0x, 1y$	$1x, 7y$
				←			
0	1	9	.111111		$0x, 0y$	$0x, 1y$	$1x, 8y$
				←			
0	1	10	.100000		$0x, 0y$	$0x, 1y$	$1x, 9y$
				←			
0	1	11	.090909		$0x, 0y$	$0x, 1y$	$1x, 10y$
				→			
1	2	10	.095238		$0x, 0y$	$1x, 1y$	$11x, 10y$
				→			
2	3	10	.096774		$0x, 0y$	$2x, 1y$	$21x, 10y$
				→			
3	4	10	.097561		$0x, 0y$	$3x, 1y$	$31x, 10y$
				←			
3	7	41	.097222		$0x, 0y$	$3x, 4y$	$31x, 41y$

Ref; A New Look at the Partch Monophonic Fabric, George Secor 1975, xH3

23 JUN 01 EW

$$2^{\left(\frac{65}{72}\right)} \quad 1.86966238416\dots$$

$$\text{Log}_2 \quad \underline{.90277777778\dots}$$

a	c	e	$\frac{c}{d}$ dec.	Root Generator Octave
$\frac{a}{b}$	$\frac{c}{d}$	$\frac{e}{f}$		$\frac{0x, 0y}{ax, ey} \quad \frac{bx, fy}$
0	1	0	1.00000	$\frac{0x, 0y}{0x, 0y} \quad \frac{1x, 0y}{1x, 0y}$
			←	
0	1	1	.500000	$\frac{0x, 0y}{0x, 1y} \quad \frac{1x, 1y}{1x, 1y}$
			→	
1	2	1	.666667	$\frac{0x, 0y}{1x, 1y} \quad \frac{2x, 1y}{2x, 1y}$
			→	
2	3	1	.750000	$\frac{0x, 0y}{2x, 1y} \quad \frac{3x, 1y}{3x, 1y}$
			→	
3	4	1	.800000	$\frac{0x, 0y}{3x, 1y} \quad \frac{4x, 1y}{4x, 1y}$
			→	
4	5	1	.833333	$\frac{0x, 0y}{4x, 1y} \quad \frac{5x, 1y}{5x, 1y}$
			→	
5	6	1	.857143	$\frac{0x, 0y}{5x, 1y} \quad \frac{6x, 1y}{6x, 1y}$
			→	
6	7	1	.875000	$\frac{0x, 0y}{6x, 1y} \quad \frac{7x, 1y}{7x, 1y}$
			→	
7	8	1	.888889	$\frac{0x, 0y}{7x, 1y} \quad \frac{8x, 1y}{8x, 1y}$
			→	
8	9	1	.900000	$\frac{0x, 0y}{8x, 1y} \quad \frac{9x, 1y}{9x, 1y}$
			→	
9	10	1	.909091	$\frac{0x, 0y}{9x, 1y} \quad \frac{10x, 1y}{10x, 1y}$
			←	
9	19	10	.904762	$\frac{0x, 0y}{9x, 10y} \quad \frac{10x, 11y}{10x, 11y}$
			←	
9	28	19	.903226	$\frac{0x, 0y}{9x, 19y} \quad \frac{10x, 21y}{10x, 21y}$
			←	
9	37	28	.902439	$\frac{0x, 0y}{9x, 28y} \quad \frac{10x, 31y}{10x, 31y}$
			→	
37	65	28	.902778	$\frac{0x, 0y}{37x, 28y} \quad \frac{41x, 31y}{41x, 31y}$

$$8/7 = 1.14285714286$$

$$\log_2 1.192645077946$$

a	c	e	$\frac{c}{d}$	dec.	Root $0x, 0y$	Generator ax, ey	Octave bx, fy
0	1	1	1.000000		$0x, 0y$	$0x, 1y$	$1x, 0y$
1	1	0		←			
0	1	1	.500000		$0x, 0y$	$0x, 1y$	$1x, 1y$
1	2	1		←			
0	1	2	.333333		$0x, 0y$	$0x, 1y$	$1x, 2y$
1	3	2		←			
0	1	3	.250000		$0x, 0y$	$0x, 1y$	$1x, 3y$
1	4	3		←			
0	1	4	.200000		$0x, 0y$	$0x, 1y$	$1x, 4y$
1	5	4		←			
0	1	5	.166667		$0x, 0y$	$0x, 1y$	$1x, 5y$
1	6	5		→			
1	2	5	.181818		$0x, 0y$	$1x, 1y$	$6x, 5y$
6	11	5		→			
2	3	5	.187500		$0x, 0y$	$2x, 1y$	$11x, 5y$
11	16	5		→			
3	4	5	.190476		$0x, 0y$	$3x, 1y$	$16x, 5y$
16	21	5		→			
4	5	5	.192307		$0x, 0y$	$4x, 1y$	$21x, 5y$
21	26	5		→			
5	6	5	.193548		$0x, 0y$	$5x, 1y$	$26x, 5y$
26	31	5		←			
5	11	6	.192982		$0x, 0y$	$5x, 6y$	$26x, 31y$
26	57	31		←			
5	16	11	.192771		$0x, 0y$	$5x, 11y$	$26x, 57y$
26	83	57		←			
5	21	16	.192661		$0x, 0y$	$5x, 16y$	$26x, 83y$
26	109	83		←			
5	26	21	.192593		$0x, 0y$	$5x, 21y$	$26x, 109y$
26	135	109		→			
26	47	21	.192623		$0x, 0y$	$26x, 21y$	$135x, 109y$
135	244	109					

3.19

$$7/4 = 1.75$$

$$\log_2 1.75 = .807354922057\dots$$

a	c	e	$\frac{c}{d}$	dec.	Root Generator Octave
b	d	f			$0x, 0y$ a_n, e_y b_n, f_y
0	1	1	1.000000		$0x, 0y$ $0x, 1y$ $1x, 0y$
				←	
0	1/2	1	.500000		$0x, 0y$ $0x, 1y$ $1x, 1y$
				→	
1	2/3	1	.666667		$0x, 0y$ $1x, 1y$ $2x, 1y$
				→	
2	3/4	1	.750000		$0x, 0y$ $2x, 1y$ $3x, 1y$
				→	
3	4/5	1	.800000		$0x, 0y$ $3x, 1y$ $4x, 1y$
				→	
4	5/6	1	.833333		$0x, 0y$ $4x, 1y$ $5x, 1y$
				←	
4	9/11	5	.818182		$0x, 0y$ $4x, 5y$ $5x, 6y$
				←	
4	13/16	9	.81250		$0x, 0y$ $4x, 9y$ $5x, 11y$
				←	
4	17/21	13	.809524		$0x, 0y$ $4x, 13y$ $5x, 16y$
				←	
4	21/26	17	.807692		$0x, 0y$ $4x, 17y$ $5x, 21y$
				←	
4	25/31	21	.806452		$0x, 0y$ $4x, 21y$ $5x, 26y$
				→	
25	46/57	21	.807018		$0x, 0y$ $25x, 21y$ $31x, 26y$
				→	
46	67/83	21	.807229		$0x, 0y$ $46x, 21y$ $57x, 26y$
				→	
67	88/109	21	.807339		$0x, 0y$ $67x, 21y$ $83x, 26y$
				→	
88	109/135	21	.807407		$0x, 0y$ $88x, 21y$ $109x, 26y$
				←	
88	197/244	109	.802377		$0x, 0y$ $88x, 109y$ $109x, 135y$