

Moon Phases

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+-----+ +-----+ +-----+ +-----+ +-----+
|mmdd.yyyy| | | | | |
+-----+ +-----+ +-----+ +-----+ +-----+
+-----+ +-----+ +-----+ +-----+ +-----+
|Date| | | | |
+-----+ +-----+ +-----+ +-----+ +-----+

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M o o n   P h a s e s
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Input Date	mmdd.yyyy	A
=====	=====	=====
MOON	MOON	MOON
=====	=====	=====
1 JUNE	4 JUNE	7 JUNE
2011	2011	2011
@@@@@@@@@@	@@@@@@@@@@	@@@@@@@@@@
@00000000@	@000...@	@000...@
@00000000@	@00000...@	@0000...@
0000000000	0000000...@	00000...@
0000000000	0000000...@	00000...@
@00000000@	@00000...@	@0000...@
@@0000000@	@@000...@	@@000...@
@@@@@@@@@@	@@@@@@@@@@	@@@@@@@@@@
NEW	1 / 4	1 / 2
=====	=====	=====
=====	=====	=====

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..==+~::~==~:.
..???I??+=+++=:~+=+,.
:00$IIII7I7$777$~+=+?+.
.OD87?I7$Z$I+?7??II+=??+?+=.
+88$7Z888ZZZ7+?++I?I?++++?++
DDOOO8OOOOZZ$7I+$77$7$+=+=+I+=.
.:D8$ZOZO00000$777OZZO+?====++++?~.
,8D8ZOZOZOZZ7$Z$00000ZI=I?$ZO77Z.
+DD8ZZOZZZZZO??ZO8OOOO7$7=~ZO8$IZ.
I888Z$ $III77$7$ZZ$ $7ZO88OO?+7O$??I.
?888$7$ $II77OZ77OZI7888888Z$ $??77Z
~Z88OZZ$I7ZZO$I I=?7008OOO$Z8DZ$IZ.
.I8888ZZZ$ $ZI7$I=++$ZOO+?ZO8OZ77I
,7Z$8ZZZ$ $O?+++=~==~?77+~I$O$III,.
I7I78O$Z7ZI??+=~++~?7+I7$ $7~.
~7OO$ $ $OOI+++++++=~??I??+7+.
+?$I$7OO$?~==~+=~==++~==?,
~7III~+~::~==++==+++=7~
.I+=~:::~==+++=+I=.
.++=:~==+++++?I:.
.,,:+++~.,

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// ##### INPUT DATE #####
LBL A STO 20 E' RCL 20 PGM 20 A 07 01 09 . 01 09 07 08 PGM 20 B PGM 20 C IXI
STO 21 / RCL 22 = INT * RCL 22 = INV SUM 21 RCL 21 IXI INT / 03 . 05 = INT
STO 21
LBL B' + 05 00 = STO 00 + 09 = STO 01 06 STO 02 RC* 00 STO 03 RC* 01 STO 04
SBR LNX
LBL LOG RCL 03 * 01 00 00 = STO 03 INT INV SUM 03 STO 05 RC* 05 OP 03 RCL 04
* 01 00 00 = STO 04 INT INV SUM 04 STO 05 RC* 05 OP 04 OP 05 DSZ 02 LOG
SBR LNX OP 00 07 05 SUM 21 RC* 21 OP 03 09 SUM 21 RC* 21 OP 04 OP 05 D' CLR
RTN

// ##### INITIALIZATION #####
LBL E' A' 02 09 . 05 03 STO 22 01 OP 69 D' C' OP 05 D' SBR COS C' OP 55 PAU
RTN

// ##### TITLE #####
LBL C' OP 00 03 00 03 02 OP 03 03 02 03 01 00 00 00 00 00 00 OP 04 RTN

// ##### EQUAL LINE #####
LBL D' OP 00 06 04 06 04 06 04 06 04 06 04 06 04 06 04 06 04 06 04 06
04 OP 04 OP 05 RTN

// ##### LOAD REGISTERS #####
LBL A' 02 INV WRT 03 INV WRT 04 INV WRT 05 INV WRT RTN

// ##### @ LINE #####
LBL LNX 05 03 05 03 05 03 05 03 05 03 OP 03 OP 04 OP 05 RTN

// ##### PRINT DATE #####
LBL COS RCL 20 / 01 00 00 = STO 21 INT INV SUM 21 + 09 09 = STO 23 RC* 23 OP
04 RCL 21 * 01 00 00 = STO 21 INT INV SUM 21 OP 06 RCL 21 * 04 INV LOG = PRT
RTN

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L A B E L S
001 11 A
052 17 B'
078 28 LOG
147 10 E'
172 18 C'
195 19 D'
226 16 A'
241 23 LNX
260 39 COS

Adr	Branch.
A	009 11 A
A'	148 16 A'
B	020 12 B
C	023 13 C
C'	160 18 C'
C'	166 18 C'
COS	164 71 SBR
D'	143 19 D'
D'	159 19 D'
D'	163 19 D'
E'	004 10 E'
LNX	075 71 SBR
LNX	122 71 SBR
LOG	119 97 DSZ

Reg.	Instr.
00	057 42 STO 067 73 RC*
01	062 42 STO 071 73 RC*
02	065 42 STO
03	069 42 STO 079 43 RCL 086 42 STO 090 44 SUM
04	073 42 STO 098 43 RCL 105 42 STO 109 44 SUM
05	092 42 STO 094 73 RC* 111 42 STO 113 73 RC*
20	002 42 STO 005 43 RCL 261 43 RCL
21	025 42 STO 037 44 SUM 039 43 RCL 049 42 STO 128 44 SUM 130 73 RC* 135 44 SUM 137 73 RC* 268 42 STO 272 44 SUM 284 43 RCL 291 42 STO 295 44 SUM 299 43 RCL
22	028 43 RCL 033 43 RCL 154 42 STO
23	278 42 STO 280 73 RC*

Reg	MoonEN_02	Reg	MoonEN_03	Reg	MoonEN_04
25	5353404040	50	.252729292725	75	0000002141
26	4040405353	51	.252729292725	76	0000040063
27	5340404040	52	.252729292725	77	0000020063
28	4040404053	53	.253536363525	78	0000020063
29	4040404040	54	.373834343837	79	0000000031
30	3232325353	55	.373834343837	80	0000020063
31	4032323253	56	.373834343837	81	0000020063
32	4040323232	57	.374142424137	82	0000040063
33	3232323253	58	.252729292725	83	0000002141
34	3232323232	59	.262829292826	84	2727000000
35	5340404032	60	.303132323130	85	0005000000
36	4040403232	61	.303334343330	86	0003000000
37	5353323232	62	.303334343330	87	0005000000
38	5332323232	63	.303334343330	88	1743000000
39	3240404053	64	.263940403926	89	0005000000
40	3232404040	65	.262829292826	90	0003000000
41	5332323240	66	.262829292826	91	0005000000
42	3232324040	67	.262829292826	92	2727000000
Reg	MoonEN_05				
100	2513310000				
101	2117143500				
102	3013350000				
103	1333350000				
104	3013450000				
105	2541311700				
106	2541274500				
107	1341220000				
108	3617333700				
109	3215370000				
110	3132420000				
111	1617150000				