HP15C Collector’s Edition

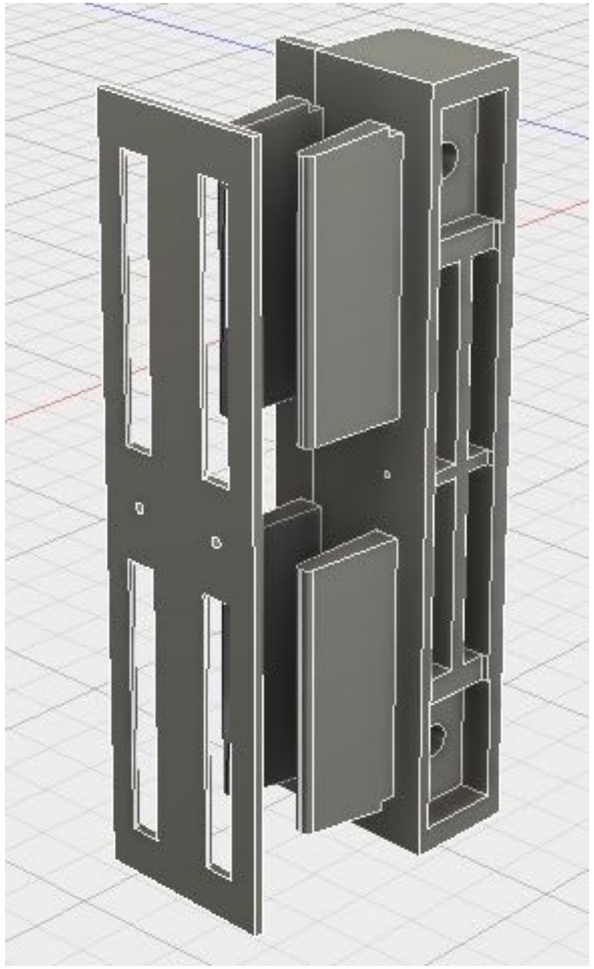
Current and Future developments

José González Divassón - The Calculator Store - HHC24

The Calculator Store

A HP calculator specialist

- Founded 2011 with the HP15c LE - www.thecalculatorstore.com
- Sells HP Calculators old and new - Moravia distributor
- Designs accessories (cases, overlays, cables) and parts for HP calculators (3D-printed with HP Multijet machines!)
- Calculator repairs (with the help of Ignacio Sánchez for Classics, Woodstocks and Spices)



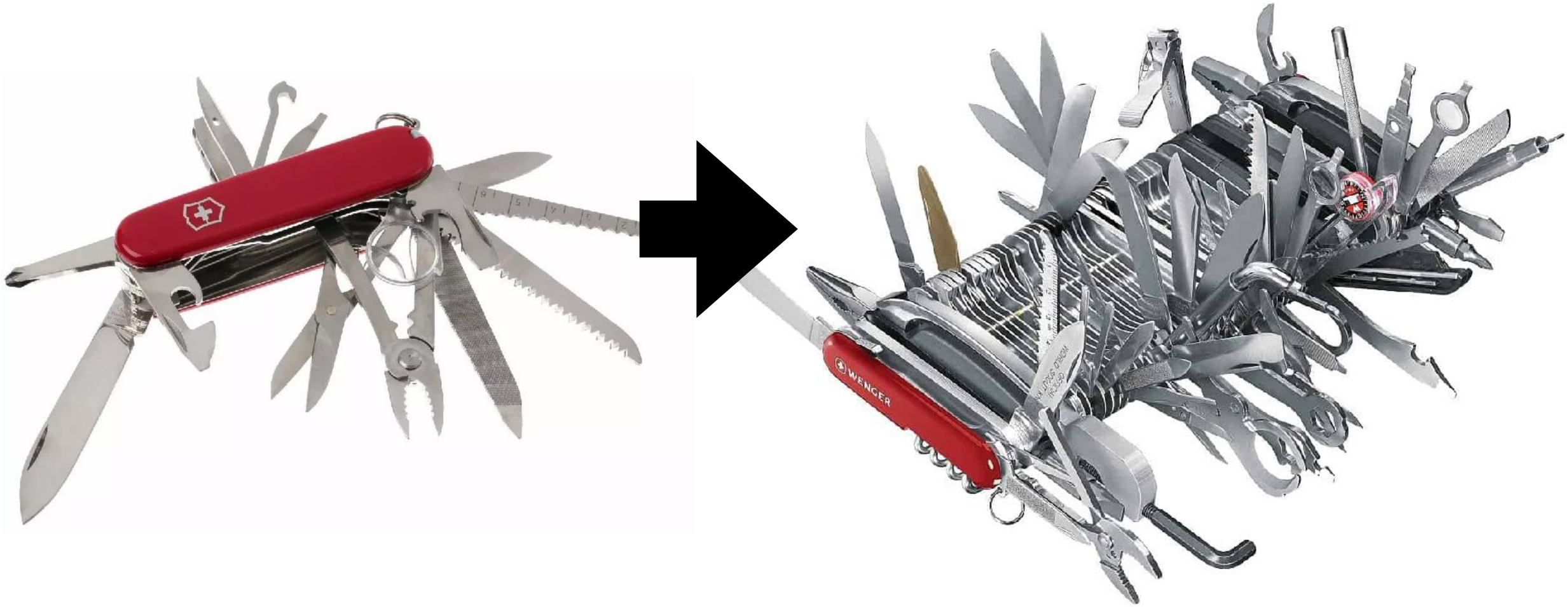
An old classic, updated

Cyrille de Brebisson took the opportunity to make some changes

- More memory: up to 196 registers instead of 65 using JF Garnier's mods, up to 1000 program steps
- Much longer battery life than LE (but not as long as the original)
- Three modes: safe (99 reg), "unleashed" (196 reg) and HP16c (NOMAS)
- Open to future enhancements through USB
- Several members of this honorable council involved

Enhancing the HP15C

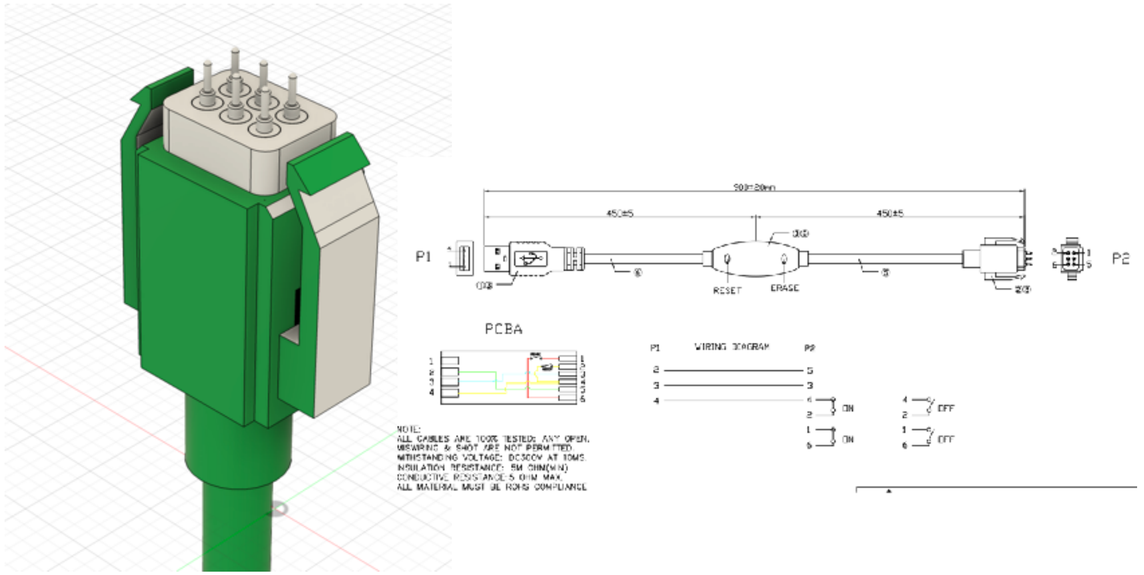
Adding features to an already “charged” calculator



The HP16C NOMAS

How to use it?

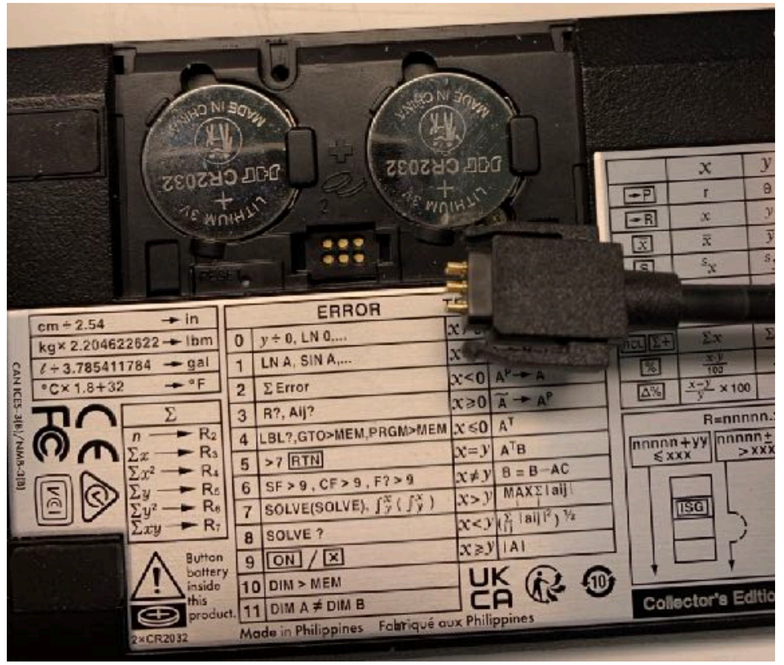
- Hampered by the nasty DEC bug
  - JF Garnier provided a fix
  - We designed a POGO cable to fix the firmware - there was nothing available off-the-shelf
- Different keyboard keyset
  - We designed a silicone overlay in three colors.



And now what?

Now, with cable, Cyrille programmed a simple I/O for the HP15c

- Simple interface protocol (USB HID mode): read and write the whole memory area.
- The simplest command-line Windows-only program: VoyagerSave
  - Back up and restore your own long programs and data
  - But also you can consider sharing program sets: the old “software pac” concept
    - Geoff Quickfall provided two pacs related to aviation
    - We put together some financial programs - Finance Pac !
    - We designed the overlays - similar to HP16c



Software pac overlays

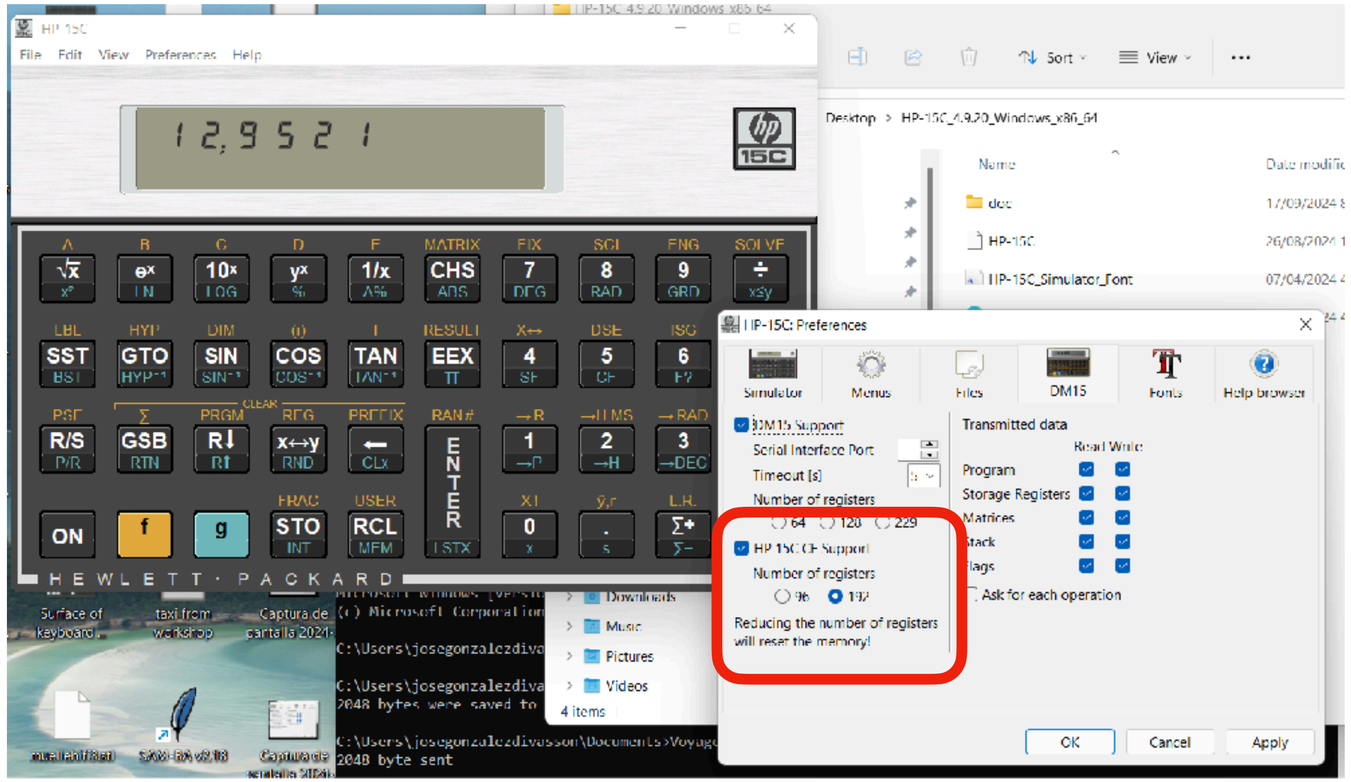
Same 3-color silicone-based technique

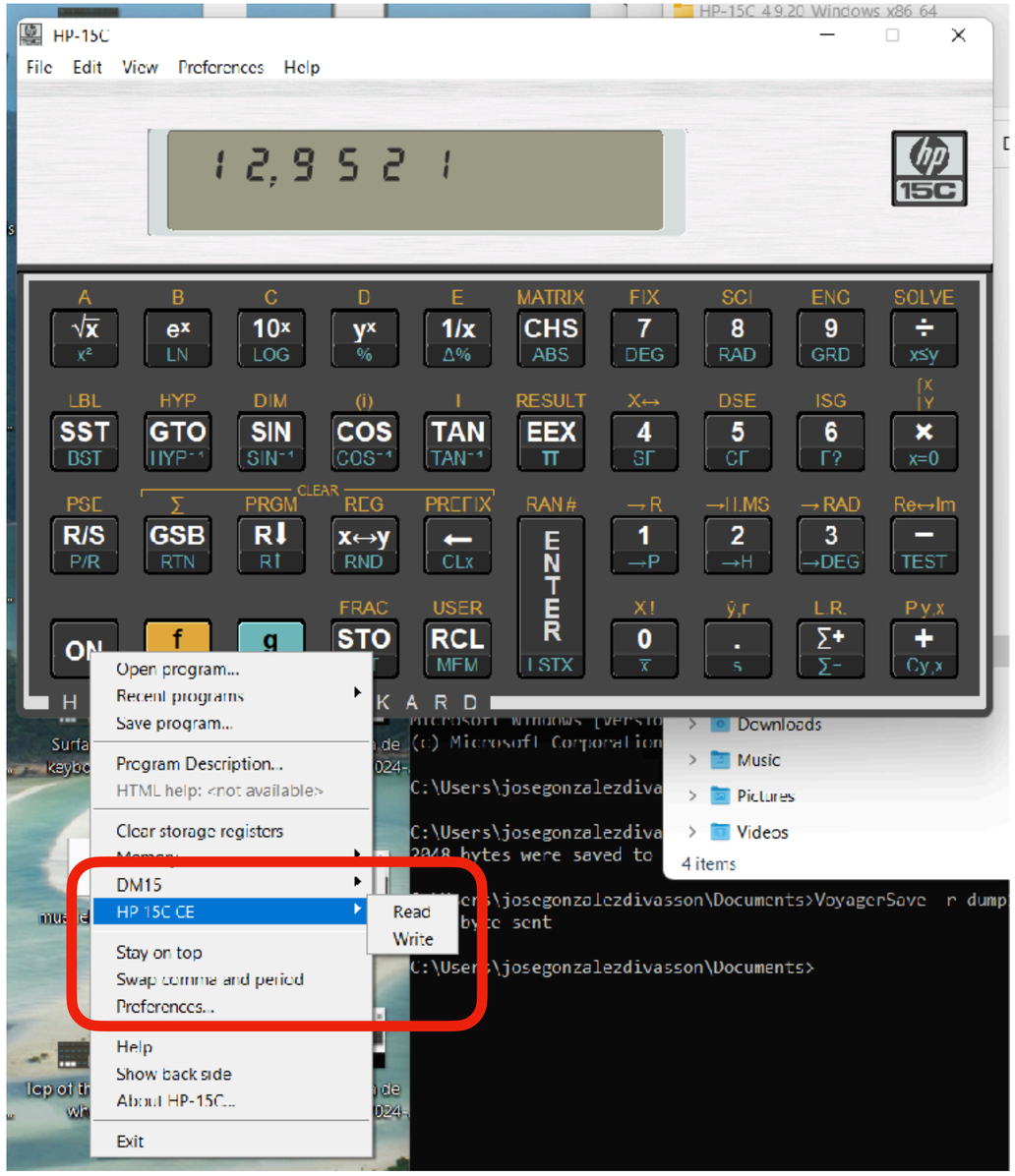
- Need at least 300 units: MOQ !!
- Same color code: yellow for keyboard plate, white on top (“GSB X”), blue on angle (“GSB .X”).
- You can come up with more pacs!

How to develop for HP15c?

Enter Torsten Manz's HP15c Simulator

- HP15c enabled version before year end
- Now read/write files - later direct connection
- Good for program documentation





HP15c Simulator

Documentation Examples

10/9/24, 12:52

Finance Pac

Description

Programs require at least 19 registers and occupy 40
launched by clicking on the function key (A to F) or G

Time Value of Money: function keys A to F. Tak

Weighted average: enter pairs of numbers with
Renders sum of volumes in Y and weighted ave

MM.DDYYYY to Julian Day number. Taken fro
Nick

Julian Day number to MM.DDYYYY - Own dev

- Sales tax. Introduce sales tax % in reg .8; gets
development

+ Sales tax. Introduce sales tax % in reg .8; get
development

DDAYS: difference between days in format MM.
Basis] from Nick. Uses MM.DDYYYY to Julian D

DATE+: date in Y in format MM.DDYYYY, increa
Gregorian to Julian and Julian to Gregorian

Day of Week : enter date in MM.DDYYYY in X,
Gregorian to Julian subroutine

NPV: Up to 18 years + initial flow. Enter number
discount % in X; returns NPV in X. Own develop

IRR: same registers as above; use f SOLVE .1 (

Program Resources

Labels

Name	Description
A	n
B	i
C	PV
D	PMT
E	FV
0	Weighted average
1	Used by TVM
2	Used by TVM

Storage Registers

Name	Description
0	CF0 in NPV
1	CF1 in NPV - n in TVM
2	CF2 in NPV - i in TVM
3	CF3 in NPV - PV in TVM
4	CF4 in NPV - PMT in TVM
5	CF5 in NPV - FV in TVM
6	CF6 in NPV
.4	used by Julian days routines
.5	used by Julian days routines
.i	used as counter in NPV

Flags

Number	Description
0	Used by TVM - CF for payments at end of period
1	Used by SOLVE routine in TVM program

Program

Line	Display	Key Sequence
000		
001	42,21, 7	f LBL 7
002	15	1/x
003	43 14	g %
004	15	1/x
005	43 32	g RTN
006	42,21, 8	f LBL 8
007	36	ENTER
008	36	ENTER
009	45 .8	RCL . 8
010	26	EEX
011	2	2
012	10	÷
013	1	1
014	40	+
015	10	÷
016	30	−
017	43 36	g LSTX
018	43 32	g RTN
019	42,21,11	f LBL A
020	44 1	STO 1
021	31	R/S
022	32 1	GSB 1
023	43 36	g LSTX

Line	Display	Key Sequence
136	36	ENTER
137	45 .9	RCL . 9
138	44 25	STO I
139	43 35	g CLx
140	42,21, .2	f LBL . 2
141	45,40,24	RCL + (i)
142	20	×
143	42, 5,25	f DSE I
144	22 .2	GTO . 2
145	45,40, 0	RCL + 0
146	43 32	g RTN
147	42,21, 0	f LBL 0
148	45 7	RCL 7
149	45, 10, 5	RCL ÷ 5
150	45 5	RCL 5
151	34	x↔y
152	43 32	g RTN
153	42,21, .8	f LBL . 8
154	45 .8	RCL . 8
155	43 14	g %
156	40	+
157	43 36	g LSTX
158	34	x↔y
159	43 32	g RTN

Line	Display	Key Sequence
272	1	1
273	1	1
274	9	9
275	30	−
276	4	4
277	20	×
278	1	1
279	30	−
280	44 .2	STO . 2
281	1	1
282	4	4
283	6	6
284	0	0
285	9	9
286	7	7
287	10	÷
288	43 44	g INT
289	44 .4	STO . 4
290	1	1
291	4	4
292	6	6
293	0	0
294	9	9
295	7	7

Pending: document span of validity of Gregorian date to Julian day number and Julian day number to Gregorian date.

10% off

Using HHUC2024 code on checkout
www.thecalculatorstore.com