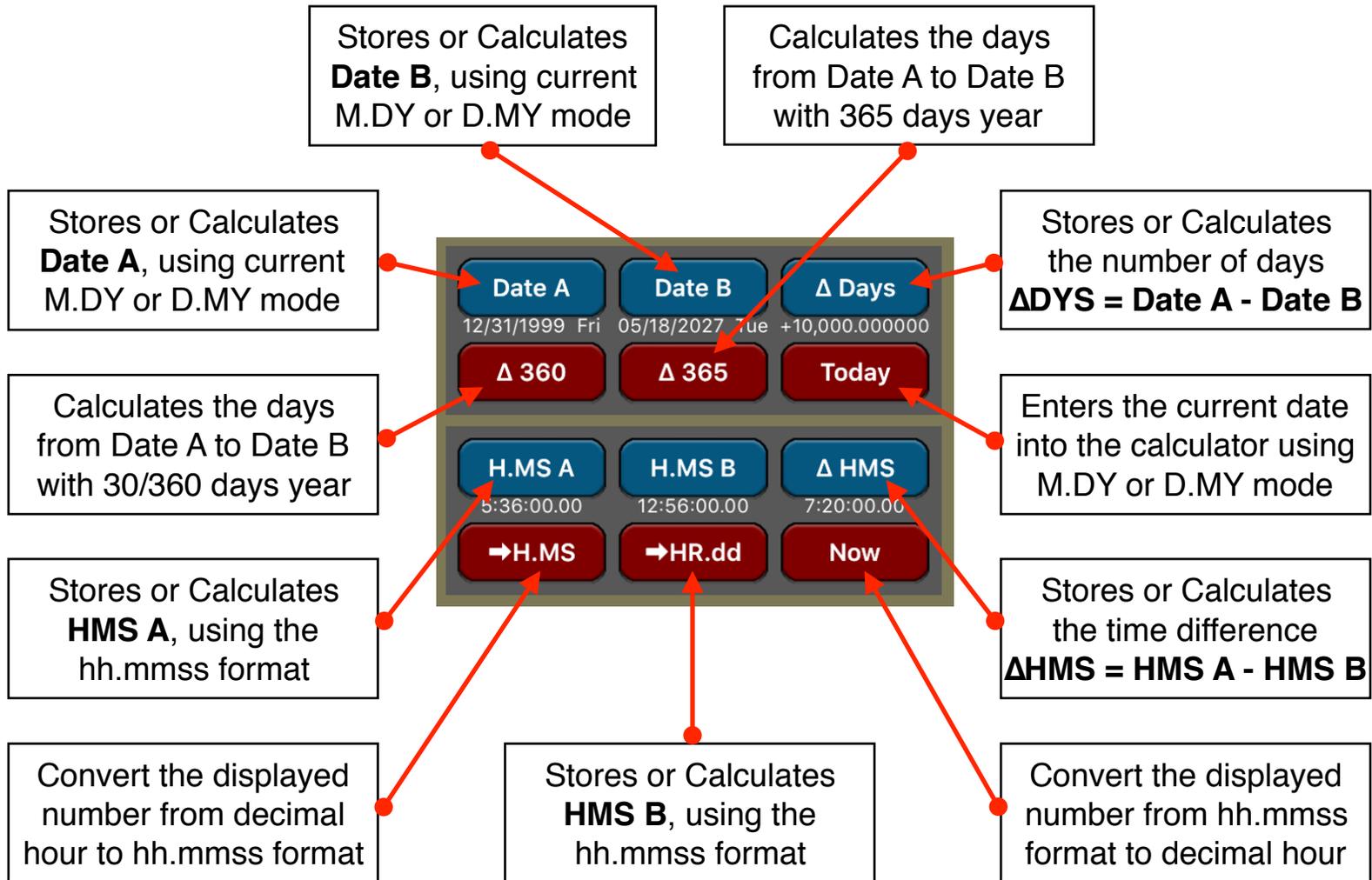# Date & Time Calculation "Pro" Tool

This tool expand the original HP-12C calculator adding more time and date calculation functions. To show it, press the **OPT** key, touch the "Business" or "Utilities" menu button, and select the "Date & Time" tool.

Stores or Calculates **Date B**, using current M.DY or D.MY mode

Calculates the days from Date A to Date B with 365 days year

Stores or Calculates **Date A**, using current M.DY or D.MY mode

Stores or Calculates the number of days **ΔDYS = Date A - Date B**

Date A	Date B	Δ Days
12/31/1999 Fri	05/18/2027 Tue	+10,000.000000

| Δ 360 | Δ 365 | Today |

H.MS A	H.MS B	Δ HMS
5:36:00.00	12:56:00.00	7:20:00.00

| →H.MS | →HR.dd | Now |

Calculates the days from Date A to Date B with 30/360 days year

Stores or Calculates **HMS A**, using the hh.mmss format

Enters the current date into the calculator using M.DY or D.MY mode

Stores or Calculates the time difference **ΔHMS = HMS A - HMS B**

Convert the displayed number from decimal hour to hh.mmss format

Stores or Calculates **HMS B**, using the hh.mmss format

Convert the displayed number from hh.mmss format to decimal hour

Example: Time Calculation

How much time has elapsed from 10:21:13 if now the time is 23:37:45?

Keystrokes	Description
Type "23.3745" **[HMS B]**	Type the final time and stored it in HMS2.
Type "10.2113" **[HMS A]**	Type the initial time and stored it in HMS1.
[ΔHMS]	Calculate the time difference. **Result = 13.1632** (13 hours, 16 minutes and 32 seconds)

Example: Nº of Days Between Dates

Find the number of days between April 20, 1949 and August 2, 1988.

Keystrokes	Description
[g] [M.DY]	Set M.DY date format.
Type "4.201949" [Date A]	Type the first date and stored it in Date A.
Type "8.021988" [Date B]	Type the second date and stored it in Date B.
[ΔDYS]	Calculate the actual number of days. **Result = 14,349.00**
[Δ360]	Calculate 30/360 Year number of days. **Result = 14,142.00**
[Δ365]	Calculate 365 Year number of days. **Result = 14,339.00**

Example: Future Date

At what date will be the day 10,000 of the current millennium ?

Keystrokes	Description
[g] [M.DY]	Set M.DY date format.
Type "12.311999" [Date A]	Store the last day of previous millennium in Date A.
Type "10000" [ΔDYS]	Convert to Rectangular. **Result = 10.3923** (X-coordinate).
[Date B]	Calculate the future date. **Result = 5.182027** (May 18,2027)

Example: Decimal Hour to H:MM:SS format

How can you read 13.2756 decimal number as a time? and the time in 1 hour and 20 minutes more ?

Keystrokes	Description
Type "13.2756" [➤H.MS]	**Result = 13.1632** (13 hours, 16 minutes and 32 seconds)
[➤HR.dd] 1.20 [➤HR.dd]	Type "1.2" and convert to decimal hours. **Result = 1.3333**
[+] [➤H.MS]	**Result = 14.3632** (14 hours, 36 minutes and 32 seconds)