# Date / Time Worksheet



This worksheet allows to perform common date and time calculations in a convenient way with all the values at sight.

| Date / Time Menu Actions   |   |  |
|--|---|--|
|  | Shows a Date picker for the Date-A or Date-B.                         |  |
| [Date A]   | Stores or calculates the Date A value (Date B - $\Delta$ Days).       |  |
| [Date B]   | Stores or calculates the Date B value (Date A + $\Delta$ Days).       |  |
| [ <b>Δ</b> Days ]  | Stores or calculates the days elapsed from 'Date A' to 'Date B'.      |  |
| [ <b>Δ</b> 360]  | Calculates the days elapsed from Date A to Date B with 360 days year. |  |
| [ <b>Δ</b> 365]  | Calculates the days lapsed from Date A to Date B with 365 days year.  |  |
| [TODAY]  | Enters the current date in the calculator.                            |  |
| [Time A]   | Stores or calculates the Time A value (Time B - $\Delta$ Time).       |  |
| [Time B]   | Stores or calculates the Time B value (Time A + $\Delta$ Time).       |  |
| [ <b>ΔTime</b> ]   | Stores or calculates the time elapsed from Time A to Time B.          |  |
| [→H.MS]  | Convert the displayed number from decimal hours to HMS format.        |  |
| [→HR]  | Convert the displayed number from HMS to decimal hours.               |  |
| [NOW]  | Enters the current time in the calculator.                            |  |
| If any other key is pressed before one of the <b>Blue</b> keys, the displayed number is stored in the corresponding variable. Otherwise, the variable is calculated. |   |  |

# Example 1: Nº of Days Between Dates (M.DY date format)

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

### Solution:

| Keystrokes        | Description  |
|-------------------|--|
| 4.201949 [Date A] | Stores the initial date in Date A = " $04/20/1949$ Wed". |
| 8.021988 [Date B] | Stores the final date in Date $B = "08/02/1988$ Tue".    |
| [ ΔDays ]         | Calculate the actual number of days. Result = 14,349     |
| [ Δ360 ]          | Calculate 30/360 Year number of days. Result = 14,142    |
| [ <u></u> Δ365 ]  | Calculate 365 Year number of days. Result = 14,339       |

## Example 2: Future Date (M.DY date format)

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

## Solution:

| Keystrokes                 | Description   |
|----------------------------|---|
| 12.311999 [Date A]         | Stores the last date of the previous millennium in Date A.          |
| 10000 <mark>[ΔDays]</mark> | Store the number of days to add in $\Delta Days$ .                  |
| [Date B]                   | Calculate the future date. <b>Result = 5.182027</b> (May 18, 2027). |

#### **Example 3: Time Calculation**

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

#### Solution:

| Keystrokes              | Description  |
|-------------------------|--|
| 10.2113 <b>[Time A]</b> | Stores the initial time in Time $A = "10:21:13"$   |
| 23.3745 <b>[Time B]</b> | Stores the final time in Time $B = "23:37:45"$   |
| [ <b>ΔTime</b> ]        | Calculate the time difference. Result -> $\Delta T = 13:16:32$ (13 hours, 16 minutes and 32 seconds) |

# Example 4: 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 ?

## Solution:

| Keystrokes  | Description  |
|---|--|
| 13.2756 <mark>[→H.MS]</mark>  | Result -> 13.1632 (13 hours, 16 minutes and 32 seconds)  |
| [→HR]   | Convert to decimal hours. Result -> 13.2756              |
| In RPN mode<br>[ENTER]<br>1.20 [→HR]<br>[+]<br>In ALG or CHN mode<br>[+]<br>1.20 [→HR]<br>[=] | Decimal hours result -> <b>14.6089</b>                   |
| [→H.MS]   | Result -> 14.3632 (14 hours, 36 minutes and 32 seconds). |