

```

12 25=2↑1↓□TS
0
□←now←□TS
2019 9 16 10 7 49 959
xmas←2019 12 25 0 0 0 0
xmas-now
0 3 9 -10 -7 -49 -959
A
+2 □NQ #'DateToIDN' now
43723
dn←{+2 □NQ #'DateToIDN'ω}
dn"xmas now
43823 43723
-/dn"xmas now
100
(24 60 60 1000↓3↓now)÷86400000
0.4221060069
dn←{(2□NQ#'DateToIDN'ω)+(24 60 60 1000↓3↓ω)÷86400000}
dn"xmas now
43823 43723.42211
-/dn"xmas now
99.57789399
A
2000 0 0 -1 -1 -1 -1 +? 100 12 28 24 60 60 1000
2099 3 14 22 55 34 576
d1←{2000 0 0 -1 -1 -1 -1 +? 100 12 28 24 60 60 1000}"i1000
]disp 2↑d1

```

2046 8 22 19 12 2 770	2022 4 9 18 51 25 150
-----------------------	-----------------------

```

□SIZE 'd1'
56032
d2←dn"d1
2↑d2
53560.80003 44659.78571
□SIZE 'd2'
8032
(□SIZE 'd2')÷□SIZE 'd1'
0.1433466591
A
1 -1□DT xmas now
43823 43723.42211
1□DT xmas now
43823 43723.42211
-/1□DT xmas now
99.57789399
A
1□DT←now
43723.42211
-1□DT 1□DT←now
2019 9 16 10 7 49 959
-1□DT 250 + 1□DT←now
2020 5 23 10 7 49 959
A
-1 □DT 0
1899 12 31 0 0 0 0
-1 □DT 1
1900 1 1 0 0 0 0
-1 □DT -0.5
1899 12 30 12 0 0 0
-1 □DT -100000
1626 3 17 0 0 0 0
A
t←'cf.dcf' □FCREATE 0
'Hello' □FAPPEND t
□FREAD t 1
Hello

```

```

    FRDCI t 1
136 0 9.411749349E10
    ←cfts←3=FRDCI t 1
9.411749349E10
    -1 2DT cfts
    2019 9 16 9 8 11 433
    1 2DT cfts
43723.38069
    A
    A 3: UNIX time
    A 4-9: Julian time variants
    4 DT <now
2458742.922
    A 10: Microsoft Win32 FILETIME
    A 11: Microsoft CLR DateTime.ticks
    10 DT <now
1.321310207E17
    A 12-13: Excel
    12 DT<1900 2 28
59
    12 DT<1900 3 1
61
    12 DT<1900 2 29
DOMAIN ERROR: Invalid timestamp
    12 DT<1900 2 29
    ^
    A 14: Microsoft OLE Automation Date
    A
    -1 DT 'J'
    2019 9 16 10 8 24 732
    -1 DT 'Z'
    2019 9 16 9 8 25 450
    1 DT 'JZ'
43723.42252 43723.38086
    24*-/1 DT 'JZ'
1
    -1 DT 'C'
    2019 9 16 12 8 27 927
    ←h←1 DT 'C'
43723.50593
    A
    dtf←1200i
    'DD/MM/YYYY hh:mm:ss' dtf h
    16/09/2019 12:08:32
    'D/M/YY hh:mm:ss' dtf h
    16/9/19 12:08:32
    '_D/_M/YYYY hh:mm:ss' dtf h
    16/ 9/2019 12:08:32
    'D MMM YYYY hh:mm:ss' dtf h
    16 SEP 2019 12:08:32
    'D MMMM YYYY hh:mm:ss' dtf h
    16 SEPTEMBER 2019 12:08:32
    'D Mmmm YYYY hh:mm:ss' dtf h
    16 September 2019 12:08:32
    'M _M MM Mmm Mmmm' dtf h
    9 9 09 Sep September
    'WWW-"W"ww-d' dtf h
    2019-W38-1
    'WWW-"W"ww-d' dtf 1 DT <2019 12 31
    2020-W01-2
    'd Ddd' dtf h
    1 Mon
    'Dddd D Mmmm YYYY hh:mm:ss' dtf h
    Monday 16 September 2019 12:08:32
    'Dddd Doo Mmmm YYYY hh:mm:ss' dtf h
    Monday 16th September 2019 12:08:32
    'Dddd Mmmm D YYYY t:mm:sspp' dtf h

```

```

Monday September 16 2019 12:08:32pm
'__fi__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Maanantai 16. syyskuu 2019 12:08:32
dtf←1200I␣'Language' 'fi'
'Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Maanantai 16. syyskuu 2019 12:08:32
'__en__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Monday 16th September 2019 12:08:32
'__da__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Mandag 16. september 2019 12:08:32
'__fr__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Lundi 16 septembre 2019 12:08:32
'__ru__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Понедельник 16 Сентябрь 2019 12:08:32
'__cy__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
DOMAIN ERROR: Unknown language 'cy'
'__cy__Dddd Doo mmmm YYYY hh:mm:ss' dtf h
^
=&NGET'Dict.json'
{
  "cy": {
    "MonthNames": [
      "Ionawr", "Chwefror", "Mawrth", "Ebrill", "Mai", "Mehefin",
      "Gorffennaf", "Awst", "Medi", "Hydref", "Tachwedd", "Rhagfyr"
    ],
    "ShortMonthNames": [
      "Ion", "Chw", "Maw", "Ebr", "Mai", "Meh",
      "Gor", "Awst", "Medi", "Hyd", "Tach", "Rhag"
    ],
    "WeekdayNames": [
      "Dydd Sul", "Dydd Llun", "Dydd Mawrth", "Dydd Mercher",
      "Dydd Iau", "Dydd Gwener", "Dydd Sadwrn"
    ],
    "ShortWeekdayNames": [
      "Sul", "Llun", "Maw", "Mer", "Iau", "Gwen", "Sad"
    ],
    "MorningAfternoon": [
      "yb", "yh"
    ],
    "Ordinals": [
      "af", "il", "ydd", "ydd", "ed", "ed", "fed", "fed", "fed", "fed", "eg",
      "fed", "eg", "eg", "fed", "eg", "eg", "fed", "eg", "fed", "ain", "ain",
      "ain", "ain", "ain", "ain", "ain", "ain", "ain", "ain"
    ]
  }
}

dict←JSON=&NGET'Dict.json'
dict.cy.ShortWeekdayNames
Sul Llun Maw Mer Iau Gwen Sad
dtf←1200I␣('Dictionary'dict)('Language' 'cy')
'Dddd Doo mmmm YYYY hh:mm:ss' dtf h
Dydd Llun 16eg Medi 2019 12:08:32
A
presents←'onsdag 25 december 2019 07:30:00'
USING←'System' 'System.Globalization, System.Globalization.dll' 'Dyalog'
lang←CultureInfo.CreateSpecificCulture='da-DK'
format←'dddd dd MMMM yyyy HH:mm:ss'
ret←NEW ByRef
DateTime.TryParseExact presents format lang DateTimeStyles.None ret
1
ret.Value.ToOADate
43824.3125
-1 14 DT ret.Value.ToOADate
2019 12 25 7 30 0 0
A
A Happy Christmas!

```