

	<b>The Gregorian Calendar</b>	<b>The Symmetry454 Calendar</b>
Days in Year	Non-Leap = 365, Leap Year = 366 days	Non-Leap = 364, Leap Year = 371 days
Leap Year	If year number is divisible by 4 (400 if century year) then add one day to February → 29 days. Leap years occur at intervals of 4 or 8 years.	If the Remainder of ( 52 x Year + 146 ) / 293 is less than 52 then add 7 days to December. Leap years occur at symmetrically arranged smoothly spread intervals of 6 or 5 years.
New Year Day	Gregorian years can start on any day of the week, therefore a new version of the calendar must be printed for each calendar year.	Every year and every month starts on Monday. The Symmetry454 Calendar is perpetual: a printed copy can be reused every year.
Length of Month	$30 + \left\{ \left( month + \left\lfloor \frac{month}{8} \right\rfloor \right) \bmod 2 \right\} \text{ days}$ If <i>month</i> = 2 subtract 2 and if Leap Year add 1	$4 + \left\lfloor \frac{month \bmod 3}{2} \right\rfloor \text{ weeks}$ If <i>month</i> = 12 and Leap Year then add 1 week.
Days Per Quarter	31 + 28 + 31 = 90 / 30 + 31 + 30 = 91 31 + 31 + 30 = 92 / 31 + 30 + 31 = 92	91 days per quarter. Every year, quarter and month starts on Monday and ends on Sunday.
Weekends per Quarter	The number of non-weekend vs. weekend days varies between quarters and from year-to-year.	Every quarter of every year has the same number of non-weekend and weekend days.
Easter and Related Days	The Easter <i>computus</i> approximates the first Sunday after the lunar opposition that is on or after the northward equinox. The clock reference meridian was never defined.	Sunday, April 7 <sup>th</sup> is proposed as a permanently fixed Symmetry454 date for Easter, based on the median date of the Sunday after the day of the astronomical lunar opposition that is on or after the day of the astronomical northward equinox, calculated for the meridian of Jerusalem.
Other Holidays	From year-to-year, events that are tied to a specific day number within a month occur on a variable weekday, and events that are tied to a specific weekday occur on a variable day number within the month.	<b>All other holidays, special event days, anniversaries, birthdays, etc. occur on a permanently fixed weekday <u>and</u> fixed day number within the month. “Collisions” of special days are less likely and easy to avoid.</b>
Calculation of Ordinal Day Number in Year	$\left\lfloor \frac{367 \times month - 362}{12} \right\rfloor + day$ If <i>month</i> > 2 subtract 2 and if Leap Year add 1	$28 \times (month - 1) + 7 \times \left\lfloor \frac{month}{3} \right\rfloor + day$
Epoch	Monday January 1, 1 = Julian January 3, 1 (same as ISO epoch, two days after Julian epoch)	Same as Gregorian / ISO epoch (because January 1, 1 was a Monday)