

## Convert Gregorian Dates to Symmetry454 (ISO leap rule)

- 1) **Sym454 Day Number (SDN)** = Day Number in the Gregorian month + **Number of Days Before**

<b>Gregorian Month:</b>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Number of Days Before:</b>	0	31	59	90	120	151	181	212	243	273	304	334

- 2) Set the Sym454 year equal to the Gregorian year.  
 3) From the table below, add the Sym454 New Year Day **offset** for that year to the SDN:

Year	offset	Year	offset	Year	offset	Year	offset	Year	offset	Year	offset	Year	offset	Year	offset
1900	0	1925	+3	1950	-1	1975	+2	2000	-2*	2025	+2	2050	-2	2075	+1
1901	+1	1926	-3	1951	0	1976	+3*	2001	0	2026	+3	2051	-1	2076	+2*
1902	+2	1927	-2	1952	+1*	1977	-2	2002	+1	2027	-3	2052	0*	2077	-3
1903	+3	1928	-1*	1953	+3	1978	-1	2003	+2	2028	-2*	2053	+2	2078	-2
1904	-3*	1929	+1	1954	-3	1979	0	2004	+3*	2029	0	2054	+3	2079	-1
1905	-1	1930	+2	1955	-2	1980	+1*	2005	-2	2030	+1	2055	-3	2080	0*
1906	0	1931	+3	1956	-1*	1981	+3	2006	-1	2031	+2	2056	-2*	2081	+2
1907	+1	1932	-3*	1957	+1	1982	-3	2007	0	2032	+3*	2057	0	2082	+3
1908	+2*	1933	-1	1958	+2	1983	-2	2008	+1*	2033	-2	2058	+1	2083	-3
1909	-3	1934	0	1959	+3	1984	-1*	2009	+3	2034	-1	2059	+2	2084	-2*
1910	-2	1935	+1	1960	-3*	1985	+1	2010	-3	2035	0	2060	+3*	2085	0
1911	-1	1936	+2*	1961	-1	1986	+2	2011	-2	2036	+1*	2061	-2	2086	+1
1912	0*	1937	-3	1962	0	1987	+3	2012	-1*	2037	+3	2062	-1	2087	+2
1913	+2	1938	-2	1963	+1	1988	-3*	2013	+1	2038	-3	2063	0	2088	+3*
1914	+3	1939	-1	1964	+2*	1989	-1	2014	+2	2039	-2	2064	+1*	2089	-2
1915	-3	1940	0*	1965	-3	1990	0	2015	+3	2040	-1*	2065	+3	2090	-1
1916	-2*	1941	+2	1966	-2	1991	+1	2016	-3*	2041	+1	2066	-3	2091	0
1917	0	1942	+3	1967	-1	1992	+2*	2017	-1	2042	+2	2067	-2	2092	+1*
1918	+1	1943	-3	1968	0*	1993	-3	2018	0	2043	+3	2068	-1*	2093	+3
1919	+2	1944	-2*	1969	+2	1994	-2	2019	+1	2044	-3*	2069	+1	2094	-3
1920	+3*	1945	0	1970	+3	1995	-1	2020	+2*	2045	-1	2070	+2	2095	-2
1921	-2	1946	+1	1971	-3	1996	0*	2021	-3	2046	0	2071	+3	2096	-1*
1922	-1	1947	+2	1972	-2*	1997	+2	2022	-2	2047	+1	2072	-3*	2097	+1
1923	0	1948	+3*	1973	0	1998	+3	2023	-1	2048	+2*	2073	-1	2098	+2
1924	+1*	1949	-2	1974	+1	1999	-3	2024	0*	2049	-3	2074	0	2099	+3

- 4) If the Gregorian month is **March or later** AND the **offset** has an **asterisk\*** then add one to the SDN.  
 5) If the SDN is more than 364 AND the **offset** is not +3, +3\*, or +2\* *then* subtract 364 from the SDN *and* add one to the Sym454 year.  
 6) If the SDN is zero or negative *then* subtract one from the Sym454 year *and* add 364 to the SDN, *and furthermore* if the **offset** = -3 OR the **prior year offset** = +3\* *then* add 7 to the SDN.  
 7) Use following list to convert the SDN to the corresponding Sym454 month and day of month.  
 (The weekday is also shown but is always the same as the actual weekday of the Gregorian date.)

**Symmetry Day Number (SDN) to Symmetry454 Date (ISO leap rule)**

SDN	Sym454	SDN	Sym454	SDN	Sym454	SDN	Sym454	SDN	Sym454	SDN	Sym454	SDN	Sym454
1	Jan 1 Mon	54	Feb 26 Fri	107	Apr 16 Tue	160	Jun 6 Sat	213	Aug 3 Wed	266	Sep 21 Sun	319	Nov 18 Thu
2	Jan 2 Tue	55	Feb 27 Sat	108	Apr 17 Wed	161	Jun 7 Sun	214	Aug 4 Thu	267	Sep 22 Mon	320	Nov 19 Fri
3	Jan 3 Wed	56	Feb 28 Sun	109	Apr 18 Thu	162	Jun 8 Mon	215	Aug 5 Fri	268	Sep 23 Tue	321	Nov 20 Sat
4	Jan 4 Thu	57	Feb 29 Mon	110	Apr 19 Fri	163	Jun 9 Tue	216	Aug 6 Sat	269	Sep 24 Wed	322	Nov 21 Sun
5	Jan 5 Fri	58	Feb 30 Tue	111	Apr 20 Sat	164	Jun 10 Wed	217	Aug 7 Sun	270	Sep 25 Thu	323	Nov 22 Mon
6	Jan 6 Sat	59	Feb 31 Wed	112	Apr 21 Sun	165	Jun 11 Thu	218	Aug 8 Mon	271	Sep 26 Fri	324	Nov 23 Tue
7	Jan 7 Sun	60	Feb 32 Thu	113	Apr 22 Mon	166	Jun 12 Fri	219	Aug 9 Tue	272	Sep 27 Sat	325	Nov 24 Wed
8	Jan 8 Mon	61	Feb 33 Fri	114	Apr 23 Tue	167	Jun 13 Sat	220	Aug 10 Wed	273	Sep 28 Sun	326	Nov 25 Thu
9	Jan 9 Tue	62	Feb 34 Sat	115	Apr 24 Wed	168	Jun 14 Sun	221	Aug 11 Thu	274	Oct 1 Mon	327	Nov 26 Fri
10	Jan 10 Wed	63	Feb 35 Sun	116	Apr 25 Thu	169	Jun 15 Mon	222	Aug 12 Fri	275	Oct 2 Tue	328	Nov 27 Sat
11	Jan 11 Thu	64	Mar 1 Mon	117	Apr 26 Fri	170	Jun 16 Tue	223	Aug 13 Sat	276	Oct 3 Wed	329	Nov 28 Sun
12	Jan 12 Fri	65	Mar 2 Tue	118	Apr 27 Sat	171	Jun 17 Wed	224	Aug 14 Sun	277	Oct 4 Thu	330	Nov 29 Mon
13	Jan 13 Sat	66	Mar 3 Wed	119	Apr 28 Sun	172	Jun 18 Thu	225	Aug 15 Mon	278	Oct 5 Fri	331	Nov 30 Tue
14	Jan 14 Sun	67	Mar 4 Thu	120	May 1 Mon	173	Jun 19 Fri	226	Aug 16 Tue	279	Oct 6 Sat	332	Nov 31 Wed
15	Jan 15 Mon	68	Mar 5 Fri	121	May 2 Tue	174	Jun 20 Sat	227	Aug 17 Wed	280	Oct 7 Sun	333	Nov 32 Thu
16	Jan 16 Tue	69	Mar 6 Sat	122	May 3 Wed	175	Jun 21 Sun	228	Aug 18 Thu	281	Oct 8 Mon	334	Nov 33 Fri
17	Jan 17 Wed	70	Mar 7 Sun	123	May 4 Thu	176	Jun 22 Mon	229	Aug 19 Fri	282	Oct 9 Tue	335	Nov 34 Sat
18	Jan 18 Thu	71	Mar 8 Mon	124	May 5 Fri	177	Jun 23 Tue	230	Aug 20 Sat	283	Oct 10 Wed	336	Nov 35 Sun
19	Jan 19 Fri	72	Mar 9 Tue	125	May 6 Sat	178	Jun 24 Wed	231	Aug 21 Sun	284	Oct 11 Thu	337	Dec 1 Mon
20	Jan 20 Sat	73	Mar 10 Wed	126	May 7 Sun	179	Jun 25 Thu	232	Aug 22 Mon	285	Oct 12 Fri	338	Dec 2 Tue
21	Jan 21 Sun	74	Mar 11 Thu	127	May 8 Mon	180	Jun 26 Fri	233	Aug 23 Tue	286	Oct 13 Sat	339	Dec 3 Wed
22	Jan 22 Mon	75	Mar 12 Fri	128	May 9 Tue	181	Jun 27 Sat	234	Aug 24 Wed	287	Oct 14 Sun	340	Dec 4 Thu
23	Jan 23 Tue	76	Mar 13 Sat	129	May 10 Wed	182	Jun 28 Sun	235	Aug 25 Thu	288	Oct 15 Mon	341	Dec 5 Fri
24	Jan 24 Wed	77	Mar 14 Sun	130	May 11 Thu	183	Jul 1 Mon	236	Aug 26 Fri	289	Oct 16 Tue	342	Dec 6 Sat
25	Jan 25 Thu	78	Mar 15 Mon	131	May 12 Fri	184	Jul 2 Tue	237	Aug 27 Sat	290	Oct 17 Wed	343	Dec 7 Sun
26	Jan 26 Fri	79	Mar 16 Tue	132	May 13 Sat	185	Jul 3 Wed	238	Aug 28 Sun	291	Oct 18 Thu	344	Dec 8 Mon
27	Jan 27 Sat	80	Mar 17 Wed	133	May 14 Sun	186	Jul 4 Thu	239	Aug 29 Mon	292	Oct 19 Fri	345	Dec 9 Tue
28	Jan 28 Sun	81	Mar 18 Thu	134	May 15 Mon	187	Jul 5 Fri	240	Aug 30 Tue	293	Oct 20 Sat	346	Dec 10 Wed
29	Feb 1 Mon	82	Mar 19 Fri	135	May 16 Tue	188	Jul 6 Sat	241	Aug 31 Wed	294	Oct 21 Sun	347	Dec 11 Thu
30	Feb 2 Tue	83	Mar 20 Sat	136	May 17 Wed	189	Jul 7 Sun	242	Aug 32 Thu	295	Oct 22 Mon	348	Dec 12 Fri
31	Feb 3 Wed	84	Mar 21 Sun	137	May 18 Thu	190	Jul 8 Mon	243	Aug 33 Fri	296	Oct 23 Tue	349	Dec 13 Sat
32	Feb 4 Thu	85	Mar 22 Mon	138	May 19 Fri	191	Jul 9 Tue	244	Aug 34 Sat	297	Oct 24 Wed	350	Dec 14 Sun
33	Feb 5 Fri	86	Mar 23 Tue	139	May 20 Sat	192	Jul 10 Wed	245	Aug 35 Sun	298	Oct 25 Thu	351	Dec 15 Mon
34	Feb 6 Sat	87	Mar 24 Wed	140	May 21 Sun	193	Jul 11 Thu	246	Sep 1 Mon	299	Oct 26 Fri	352	Dec 16 Tue
35	Feb 7 Sun	88	Mar 25 Thu	141	May 22 Mon	194	Jul 12 Fri	247	Sep 2 Tue	300	Oct 27 Sat	353	Dec 17 Wed
36	Feb 8 Mon	89	Mar 26 Fri	142	May 23 Tue	195	Jul 13 Sat	248	Sep 3 Wed	301	Oct 28 Sun	354	Dec 18 Thu
37	Feb 9 Tue	90	Mar 27 Sat	143	May 24 Wed	196	Jul 14 Sun	249	Sep 4 Thu	302	Nov 1 Mon	355	Dec 19 Fri
38	Feb 10 Wed	91	Mar 28 Sun	144	May 25 Thu	197	Jul 15 Mon	250	Sep 5 Fri	303	Nov 2 Tue	356	Dec 20 Sat
39	Feb 11 Thu	92	Apr 1 Mon	145	May 26 Fri	198	Jul 16 Tue	251	Sep 6 Sat	304	Nov 3 Wed	357	Dec 21 Sun
40	Feb 12 Fri	93	Apr 2 Tue	146	May 27 Sat	199	Jul 17 Wed	252	Sep 7 Sun	305	Nov 4 Thu	358	Dec 22 Mon
41	Feb 13 Sat	94	Apr 3 Wed	147	May 28 Sun	200	Jul 18 Thu	253	Sep 8 Mon	306	Nov 5 Fri	359	Dec 23 Tue
42	Feb 14 Sun	95	Apr 4 Thu	148	May 29 Mon	201	Jul 19 Fri	254	Sep 9 Tue	307	Nov 6 Sat	360	Dec 24 Wed
43	Feb 15 Mon	96	Apr 5 Fri	149	May 30 Tue	202	Jul 20 Sat	255	Sep 10 Wed	308	Nov 7 Sun	361	Dec 25 Thu
44	Feb 16 Tue	97	Apr 6 Sat	150	May 31 Wed	203	Jul 21 Sun	256	Sep 11 Thu	309	Nov 8 Mon	362	Dec 26 Fri
45	Feb 17 Wed	98	Apr 7 Sun	151	May 32 Thu	204	Jul 22 Mon	257	Sep 12 Fri	310	Nov 9 Tue	363	Dec 27 Sat
46	Feb 18 Thu	99	Apr 8 Mon	152	May 33 Fri	205	Jul 23 Tue	258	Sep 13 Sat	311	Nov 10 Wed	364	Dec 28 Sun
47	Feb 19 Fri	100	Apr 9 Tue	153	May 34 Sat	206	Jul 24 Wed	259	Sep 14 Sun	312	Nov 11 Thu	365	Dec 29 Mon
48	Feb 20 Sat	101	Apr 10 Wed	154	May 35 Sun	207	Jul 25 Thu	260	Sep 15 Mon	313	Nov 12 Fri	366	Dec 30 Tue
49	Feb 21 Sun	102	Apr 11 Thu	155	Jun 1 Mon	208	Jul 26 Fri	261	Sep 16 Tue	314	Nov 13 Sat	367	Dec 31 Wed
50	Feb 22 Mon	103	Apr 12 Fri	156	Jun 2 Tue	209	Jul 27 Sat	262	Sep 17 Wed	315	Nov 14 Sun	368	Dec 32 Thu
51	Feb 23 Tue	104	Apr 13 Sat	157	Jun 3 Wed	210	Jul 28 Sun	263	Sep 18 Thu	316	Nov 15 Mon	369	Dec 33 Fri
52	Feb 24 Wed	105	Apr 14 Sun	158	Jun 4 Thu	211	Aug 1 Mon	264	Sep 19 Fri	317	Nov 16 Tue	370	Dec 34 Sat
53	Feb 25 Thu	106	Apr 15 Mon	159	Jun 5 Fri	212	Aug 2 Tue	265	Sep 20 Sat	318	Nov 17 Wed	371	Dec 35 Sun