Calculating the date of Easter for any given year in the Gregorian calendar

By Tim Ackers, 30 May 2003

In the worksheet "Easter" enter the Gregorian year in the white cell so labelled (cell D5)
Relevant religious factors are displayed, including the date of Easter Sunday.

Source

The algorithm used was developed in 1965 by Thomas H O'Beirne of Glasgow University,
published in his book Puzzles and Paradoxes (Oxford University Press).
The method is based on a technique originally invented in 1800 by German mathematician
Carl Friedrich Gauss. The original algorithm contained a flaw that gives April 13 as the
date for Easter Sunday in the year 4200 when the correct date should be April 20.
A correction to the agorithm was published in 1876 in the journal Nature by an anonymous
American. A commentary by Ian Stewart appears in Scientific American, March 2001.

It should be noted that certain Eastern European authodox catholic churches continue
to define Easter by reference to the Julian calendar, and accordingly they celebrate
Easter on different dates. This caused a catastrophic failure of cooperation between
allied forces in a battle in the Napoleonic wars, where the allied armies were operating to
the same date in different calendars, which were in practice some weeks apart.

It may be of some interest to note that the cycle of Easter dates repeats exactly after
5,700,000 years, by which time of course astronomical variations will have rendered
the Gregorian calendar obsolete in any case, even assuming humanity were to survive.

Year	2004	A
Golden Number	10	
Epact	8	
Dominical letter	C	
Easter	11 April	