

How do you determine the date of Easter each year? (3 pages)

Q: During our Bible study this past Sunday, someone asked how Easter can be on a different Sunday every year. Pastor said it had to do with the aligning of the moon, but didn't know the exact reason why. Can you please explain how Easter Sunday is selected every year and the theological reasoning behind it?

A: When it comes to figuring out the date for Easter, there is really no simpler way than just looking at the calendar for the upcoming year. But how do the calendar makers know when Easter will be? For instance, in 1999, it was April 4. In 2000, it was April 23. How exactly is the date for Easter determined?

The early church had the same problem, and the root of the problem is this: How exactly do you date the crucifixion and resurrection of Jesus? We know that he was crucified on a Friday and rose again on a Sunday, but since Sundays do not always have the same date, another system of calculating a date had to be devised.

How They Used to Do It

By the middle of the second century, there were basically two ways that Christians were dating their celebrations of Easter. Some, the Quartodecimans (or “fourteenths”), celebrated the death and resurrection of our Lord according to the “fourteenth day of Nisan”—the day of the Jewish Passover (Lev. 23:5). Since this date was not always on the same day of the week, the Quartodeciman celebration did not always fall on a Sunday. The rest of the church, however, celebrated the passion and resurrection of our Lord according to a different formula which always placed Easter on a Sunday.

Needless to say, there was no little controversy over this discrepancy, and it wasn't until the Ecumenical Council of Nicea in A.D. 325 that the churches of the world finally got together and agreed on this rule: Easter Day shall always fall on the Sunday after the first full moon that occurs on or after the spring equinox. That should have settled it, right?

Well, not exactly. You see, there was the little problem of determining when exactly the spring equinox would fall. Various astronomical and calendrical solutions have been used at different times down through the centuries, but even today there is still no unanimity among churches concerning the celebration of Easter.

Just Not the Same

For instance, the Eastern Orthodox Churches (Greek, Russian, Romanian, etc.) celebrate Easter according to the spring equinox on the older Julian Calendar. Lutherans in the Western Church (along with Roman Catholic and Protestant churches) celebrate Easter according to the newer Gregorian Calendar (in effect since 1582). What all of this means is that the eastern celebration of Easter usually follows anywhere from a week to several weeks after the western celebration. So what's the solution? One possibility would be to go on celebrating our respective Easters and just not worry about it. A proposal as recent as 1997, however, has suggested that both east and west use a modern, scientific astronomical calculation for the spring equinox. After all, even our more accurate Gregorian calendar of the west was off this year, since the spring equinox actually occurred on March 20, and not the traditional March 21.

Most of the change suggested by this new proposal, however, would have to come from the Eastern Church, which isn't likely to happen.

The 'Easy Way' and the 'Hard Way'

So what's the easiest way to determine the date for Easter? In the two sections below, the Commission on Worship has provided the "easy way" and the "hard way." Since the chart in the front of The Lutheran Hymnal (p. 158) expires this year, the Commission thought it would provide a new chart through 2025. That's the "easy way." (A similar chart will appear in the new hymnal!) But if you want to do it the "hard way," see the next page where the Commission has also provided an algorithm for you to calculate, compliments of Dr. Luther Poellot, St. Louis. Algorithm for Determining the Date of Easter (1900-??)

Note: Unless your calculator gives remainders, you will need to do most of this calculation in longhand. Math teachers, this could make a good problem for your class to solve at the pre-algebra level. At higher levels of algebra, it could serve as a good discussion question concerning the "why" of its various components.

Part I:

v = the remainder when you divide the number of the year (e.g., 1985) by 19. For 2001, $v = 3$.

w = the remainder when you divide the number of the year by 4. For 2001, $w = 1$.

x = The remainder when you divide the number of the year by 7. For 2001, $x = 6$.

y = The remainder from $(19v + 24) \div 30$. For 2001, $y = 21$.

z = The remainder from $(2w + 4x + 6y + 5) \div 7$. For 2001, $z = 3$

Part II:

$y + z + 22$ = date in March for Easter. If this number is greater than 31, either a) subtract 31 = date of Easter in April;

b) or calculate $y + z - 9$ = date of Easter in April.

Dates of Easter

In the western church, Easter cannot be earlier than March 22 or later than April 25.

2011.	2011	April 24
2012.	2012	April 8
2013.	2013	March 31
2014.	2014	April 20
2015.	2015	April 5
2016.	2016	March 27
2017.	2017	April 16
2018.	2018	April 1
2019.	2019	April 21
2020.	2020	April 12
2021.	2021	April 4
2022.	2022	April 17
2023.	2023	April 9
2024.	2024	March 31
2025.	2025	April 20
2026.		

Usage: We urge you to contact an LCMS pastor in your area for more in-depth discussion.

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