Calendars and Thinking Logically  
Fred C. Smith and Brant Abrahamson

'What year is it?" Most Americans--even quite young children--can almost immediately answer this question. They wouldn't ponder because our calendar is taken for granted. We "naturally" use it to determine schedules, calculate age, make loan payments and plan for the future. As we become educated we expand our historical horizons and understand that our calendar had a "starting point" about 2,000 years ago. We know that from this starting point most people count forward in "A.D." (or C.E. as we use in APWH) times and backward in "B.C." (or B.C.E.) eras.

Further, we understand that other calendars exist. Most know of the age-old Chinese calendar. We're annually reminded of it during Chinese New Year celebrations. We learn that they celebrate the "Year of the Rabbit" (1999) and other creatures in a twelve-year cycle that extends back more than 5,000 years. If we are followers of Islam or have studied the faith, we know the Muslim calendar begins with Muhammad's flight from Mecca to Medina in 622 CE. (by "our" calendar).

Generally speaking, people link their calendar to some important event in their history. The Chinese calendar is linked to what they believed to be the first Chinese Dynasty, and Muslims use an event in Muhammad's life. Much the same thing happened in Christian Europe.

Our way of numbering years was created around 1,470 years ago. Before this, the "Julian" calendar was used in the Roman Empire. Julius Caesar knew the existing system had flaws, and he wanted to develop a more accurate calendar. When he defeated Pompey's forces in Egypt (46 BCE), he linked up with Cleopatra who was an intelligent and educated woman. She told him of her country's superior ways of measuring time, and had one of Egypt's expert astronomers meet with them. After returning to Rome, Julius Caesar started his reform based on what he had learned.

Caesar's new calendar had a cycle of three 365-day years followed by a fourth year of 366-days--the "leap year." The starting point of his calendar--the Julian calendar--retained the (legendary) founding of the city of Rome centuries before. It went into effect in 709 a.u.c. (ab urbe condita--from the city's founding).

Much later--after Christianity was made a state religion in the Roman Empire under Constantine (306-337 CE)--Christians began to want calendar years that referred to something of religious significance to them. The calendar that emerged--our basic system for numbering years--included the Julian calendar's 12 months and Constantine's 7-day weeks. It was the product of Church politics along with Dionysius's scholarship and guesswork.

At any rate, Dionysius calculated that Jesus was born 525 years before the time that Pope John I asked him to make the calendar of Easters. That placed Jesus' birth close to the beginning of the year 754 a.u.c. Dionysius's first "year of the Lord" (Year One anno Domini--1 A.D.) corresponded to the Roman year 754 a.u.c.

Dionysius began his calendar with the year one. He couldn't begin it with "0"--such as we use--because there is no zero in Roman numerals. Roman "numerals" are actually letters: I, II, III, IV, V, VI, VII, VIII, IX, X, etc., along with L for fifty, C for a hundred, D for five hundred, M for a thousand. The first century had to start with anno Domini I and end with C [100]. The second century thus began with the year 101 just as our 20th century began in 1901. As far as counting years is concerned, the 21st Century will begin in 2001.

"Arabic" numerals with the concept of zero were devised by Hindu/Indian scholars in South Asia sometime in the distant past. Arab Muslims brought them west and improved them, but they didn't become widespread in Europe until about the time of Christopher Columbus. What we write as 1000 A.D. was known then as the "M", or millennium year.

As a final note, this calendar is now used world-wide. Christian Europe's great political and economic power beginning about 1500 A.D. accounts for this fact.1 As one might expect, many non-Christians find the B.C. ("Before Christ") and A.D. (anno Domini --"In the Year of Our Lord") symbols objectionable. As a result, there's been a gradual change to "C.E." (common or current era) and "B.C.E." (before the common era). This is what we use in APWH. The numbering system, though, is exactly the same.