Look at the tombstone on the left. How old was Nerdo when he died? Most novice problem-solvers would incorrectly give the age of Nerdo as 7 instead of 6 years old.

One common error is the belief that the Christian era started on January 1, 0 (year 0). As a result, January 1, 1 would denote a duration of “1 year old,” January 1, 100 a period of “100 years old,” and so on.

The trouble with this is that there was never a year 0. The year before 1 A.D. was 1 B.C. The abbreviation B.C. stands for “before Christ,” and A.D. stands for “anno Domini” (‘in the year of the Lord’).

**B.C.: ‘before Christ’**

**A.D.: ‘anno Domini’**

(‘in the year of the Lord’)

The real number line has a zero; numbers on the right of zero are the positive numbers (1, 2, 3, …), and numbers on the left of zero are the negative numbers (−1, −2, −3, …). However, our calendar number goes from 1 B.C. to 1 A.D. without a zero. Jesus Christ was arguably born in 1 A.D., and the year before his birth was 1 B.C. So A.D. 0 and 0 B.C. do not exist.
Our present-day calendar takes the year Jesus Christ was born as A.D. 1. We express years before his birth in B.C., and years after his birth in A.D. For example, the year 2010 means that it has been 2010 years since Jesus Christ was born. Unless we are comparing years before the birth of Christ, we usually do not use the abbreviation A.D. (or AD) to denote years from 1 A.D.

Even your birthday is dated by His Birthday!

Even your birthday is dated by His Birthday!

If a baby has not lived a year, is she zero years old?

Back to the tombstone question, from 3 B.C. to 4 A.D., there is only 6 years, rather than 7, because there is no zero year.

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When Was Jesus Born?

Jesus Christ was 2000 years old in the year 1997!

Although there is no clue from the Holy Scriptures when Jesus Christ was born, based on our present-day calendar, most scholars believed that it is out by several years. Paradoxically, Jesus is believed to be born some four years “before Christ” (B.C.)!

The sixth-century Roman Abbot and astronomer Dionysius Exiguus (c. 470 – c. 544) was responsible for fixing the birth of Jesus Christ (the “Son of Man”) on 25 December A.D. 1. He divided history into “before Christ” and “anno Domini.” Technically speaking, Jesus was born in the year 4 B.C.

The year 1 B.C. was the year before the birth of Christ.

The year 1 A.D. began with the birth of Christ.

“A little knowledge about God can be dangerous to your eternal health.”

Patrick Morley

Today, in the name of political correctness (PC), non-theists or atheists prefer a dating system that uses BCE (“before the Common Era”) and CE (“Common Era”), for they argue
that both B.C. and A.D. reflect a Christ-centered viewpoint. So the
days of seeing B.C. and A.D. in future may be numbered, as Christian
agnostics or atheists push forward their non-religious views in the
public sphere.

Your religious position will determine whether you are
comfortable with the usage of B.C. and A.D. Meanwhile, let not
any PC prevent us from the joy of mathematical problem solving
when it comes to solving problems on B.C. and A.D.

Did you know...

A 60-year-old person has lived a full three percent of the
time since Jesus was born.

Puzzles on Zero Year

Because there is no zero year in the calendar, many puzzles have been
designed to take advantage of this calendrical oddity.

Here are some “B.C./A.D.” questions which directly or indirectly
relate to the zero year. How many of them can you solve?

0. A Rare Coin

An antique collector was told of a coin that was unearthed in China with the inscription
(in Latin): 53 B.C.

“This coin is definitely fake,” the collector said without a second thought.

How did he know, without seeing the coin or even a picture of it?

1. The Rise and Fall of the Roman Empire

How many years had elapsed from the rise of the Roman Empire in 753 B.C. to the fall of
the Roman Empire in 422 A.D.?
2. **How Many Birthdays?**
   Job is 5 years old, Ruth is 4 years old, and Paul is 8 years old. How many birthdays have all these children had?

3. **Was She a Centenarian?**
   If a woman was born on the first day of the year 50 B.C. and died on the first day of the year 50 A.D., how long did she live?

4. **A “Priceless” Coin**
   At a coin dealer’s shop, a shoplifter stole the oldest coin, dated 156 B.C. If a rare coin is worth $20 for each year before Christ that it was minted, how much could he sell it for?

5. **The Most-Lettered Year**
   Which year from the birth of Christ to the present requires the most letters when written as a Roman numeral?

6. **Periodically Speaking**
   Find the number of years between 34 B.C. and A.D. 60.

7. **Birth of Cleopatra**
   Boadicea died 129 years after Cleopatra was born. Their combined ages were 100 years. Cleopatra died in 30 B.C. When was Boadicea born?

8. **An Impossibility Made Possible**
   A man was born in the year 1180 and yet died in the year 1163. Using the normal calendar, how is this possible?

9. **Death of Thales**
   Thales, a Greek mathematician, was born in 640 B.C. and lived for 86 years. When did Thales die?
10. Birth of Plato
Plato, a Greek philosopher and mathematician, died in 347 B.C. after living for 80 years. When was he born?

11. Lifespan of Archimedes
Archimedes, a Greek mathematician, was born in 287 B.C. and died in 212 B.C. For how long did he live?

12. Birth of the Demigod
Sir Isaac Newton, the British mathematician and scientist, died in A.D. 1727 after living for 85 years. When was he born?

13. Triskaidekaphobia
If Christmas 1913 A.D. fell on a Thursday, how many Fridays the 13ths were there in that year?

14. An Iceman’s Birthday
The iceman found recently in a glacier was at first thought to be about 5300 years old. Roughly when did he have his 17th birthday?

A. 2700 B.C.  B. 3300 B.C.  C. 3700 B.C.  D. 5300 B.C.  E. 7300 B.C.

15. The Myth of Reincarnation
Using the concept of B.C. and A.D., if we take A.D. 2000 as Year 1 and the year before as Year –1, then in which year were you born? In which years were your parents born?

16. Historically Speaking
Using the concept of B.C. and A.D., answer the following questions with reference to history books.

(a) The Republic of Singapore was founded in 1965. If we take this year as Year 1 and the year before as Year –1, then in which year was the Second World War?
(b) If we take the year the Malays set foot in Singapore as Year 1, then what year is it now?

17. First Day of the Millennium
What was the first day of the 20th century?

18. First Date of the Millennium
What date does the third millennium start?

From birth date to death date

LIFE IS SHORT!

1870 – 1920

The length of the dash between the dates on a tombstone is short—life is short.

Where will we go?

1870 – 1920?

What you do with the dash determines where you will go.