

# What About ... Proving $1+1=2$

By Dave DeWitt

Upon finishing this paper, I told my wife, "I just proved that  $1+1=2$ ." She said, "I'm relieved to hear that." Somehow, I don't think she was being sincere. But, really, believe it or not, this needs to be proved, and the proof also establishes the existence of God. Which is why it's a relevant discussion.

## Pantheists

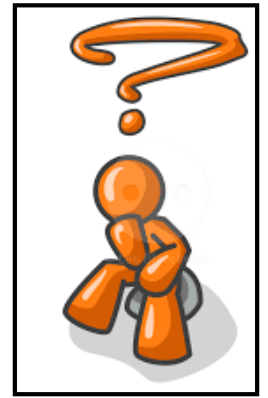
Pantheists use mathematics practically but not theologically. They claim the whole universe is one god-force. So, for example, Vedantic Hinduism would claim  $1+1=2$  is an illusion, whereas in the universe all is one. So,  $1+1=1$ . If you pointed out this is illogical, they would actually like that, because they believe logic is just a western invention. Of course, they have to use logic to prove there is no such thing as logic. But that doesn't seem to bother them. When they attempt to illustrate that with the real world, it doesn't work. For example, some say if you add one drop of water to another drop of water, you still have one drop of water,  $1+1=1$ . The problem, of course, is that a drop of water is made up of a certain number of atoms. Another equal-sized drop of water has the same number of atoms. If you put them together, you have twice the number of atoms.  $1+1=2$ , not 1.

## Atheists

Atheists, and those who think like atheists (progressives, evolutionists, humanists, Marxists), cannot accept  $1+1=2$  as existing in the real universe. Their idea is that  $1+1=2$  is not something that man discovered. Rather, it is something man created. Mathematics, they say, is invented by man.

## The Problem

The problem with the conclusions of both the pantheists and the atheists is that mathematics can actually describe reality. True, man has added mathematical labels to real concepts, but the letters and numbers represent an ordered reality in the physical world which man did not create. We label things with 1s, 2s, Xs, Ys, and Zs. We label processes with +s and -s, and conclusions with = signs. But we only create the labels, not the reality.



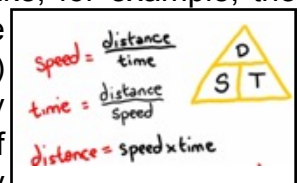
Joe Carter from the Gospel Coalition gave this example.

Gottfried Wilhelm Leibniz, an inventor of the calculus, was asked by one of his students, "Why is one and one always two, and how do we know this?" Leibniz replied, "One and one equals two is an eternal, immutable truth that would be so whether or not there were things to count or people to count them." [thegospelcoalition.org]

It's as basic as the old question, "If a tree falls in the woods, does it make noise whether or not there is anyone around to hear it?" Well, of course it does. How do we know? Because when trees fall, they make noise. Man can recognize it or record it, or not. But he does not cause it.

## Do the Math

Mathematics only recognizes, labels, and reasons through reality. Take, for example, the simple formula: distance equals velocity (speed) times time. We call it  $d=vt$ . But then, because of the logic represented by algebra, it's also true that  $v = d/t$  and  $t = d/s$ . If I drive at 60 mph for 2 hours, I will travel a distance (d) of 120 miles. Suppose I am going to grandma's house and she lives 120 miles away, and I drive 60 mph. Then I know I will get to grandma's in 2 hours of time (t). If grandma lives 120 miles away and it took me 2 hours to get there, my velocity (v) averaged 60 mph. Knowing two, the third can be instantaneously calculated by the GPS on my phone, car, airplane, or on a spaceship. But where did this information come from? Answer: It's just there. It's part of reality. It's as real as a tree falling and making noise.



We discovered it, but we didn't create it. We put numbers on it and applied the logic of algebra to it, but  $d = v t$  simply exists in the universe.  $d = v t$  and  $1 + 1 = 2$  were just as true in the Garden of Eden, when Noah was on the ark, and when Abraham moved to Canaan. There was just no need to figure it out.

## Evaluation

Let's evaluate some ideas proposed about mathematics:

- "Math is not about God, it's just what mathematicians do." **Comment:** The symbols and numbers are human things, but the reality they represent are created by God.
- "Math is only about man, it does not glorify God." **Comment:** Although mathematicians can just use math to solve problems for "fun," math is also a logical tool. Like any tool, it has no value in itself, and it can be used for good or evil. But mathematics can be used to provide goods and services that can help us love one another, facilitate ministry or give to the poor, all of which can be pleasing to God.
- "Math is not a philosophy, a theology, or a morality." **Comment:** True, math is not a morality, it can be used for good or evil. But it is a philosophy in the sense that it believes there is an order in the universe which can be discovered and explained logically. There are three things I know for sure: (1) I exist, (2) the universe is real, and (3) reason must be used to understand reality. The last of these requires logic to solve problems, and mathematics supplies us with a language, a tool, and a consistent process, for applying reason to reality. But does math imply a theology? I think it does.

Mathematics does not allow us to exhaustively understand the universe. But it proves that an orderly system of logical symbols and equations can be used to study the universe. Order never comes from chaos or chance. Ever! Order comes from an intelligent being creating it. If you observe a bird nest, a beaver dam, a foxhole, or a mansion in Beverly Hills, you can be sure there is an intelligent

being who made chaos into order. Mathematics proves that the universe is full of order that can be understood with logic and reason. Order only comes from an orderly being and, since the universe has never been observed creating anything, an order-making creator must exist.  $1 + 1 = 2$  proves the existence of a creating, orderly God who holds all things together.

## Conclusion

- **Job 38:1, 4-6** *The Lord answered Job... "Where were you when I laid the foundation of the earth? Tell Me, if you have understanding, Who set its measurements? Since you know, or who stretched the line on it? On what were its bases sunk? Or who laid its cornerstone ...?"*
- **Psalms 19:1** *The heavens are telling of the glory of God; and their expanse is declaring the work of His hands.*
- **Psalms 104:24** *O LORD, how many are Your works! In wisdom You have made them all...*
- **Proverbs 9:9-11** *Give instruction to a wise man and he will be still wiser, teach a righteous man and he will increase his learning. The fear of the LORD is the beginning of wisdom, and the knowledge of the Holy One is understanding.*
- **Jeremiah 10:12** *It is He who made the earth by His power, who established the world by His wisdom; and by His understanding He has stretched out the heavens.*
- **Romans 1:20** *For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse.*
- **Colossians 1:16-17** *He is before all things, and in Him all things hold together.*