What Two Plus Two Is

From Warren Watson's personal research at Queen's University from the Summer of 2003
At this time, still unpublished
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Abstract

Through experiment, $2 + 2$ has been found to be 4 plus zero minus nothing. This conforms exactly with the theoretical value of 4, but it cannot be compared with literature as this subject seems to be completely absent from all sources available. This must certainly be ground breaking work.

Introduction

The goal of this experiment is to find $2 + 2$. The quest for the solution of this problem dates back to just after the caveman. None of this early research can be attributed to the caveman because the caveman had major problems with $1 + 1$[1]. No one could be found who would admit being the closest direct descendant to the caveman, but sources confirmed that the caveman indeed thought $1 + 1$ was 3 (and baby makes 3). Finding $2 + 2$ is very useful because just as $1 + 1$ allowed us to advance in mathematical complexity so will $2 + 2$.

Theory

From political science but ignoring existential philosophy, it is well established that nothing and nothing is nothing.

So

$$n + n = 0 \qquad \text{for} \quad n = 0$$

We can assume that $\quad n + n = 2 \qquad \text{for} \quad n = 1$

So by twisted mathematical induction (tmi), I can conclude that

$$2 + 2 = 4$$

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[1] Flintstone, Fred, ed., Rockpile Metorite produced on hinged slate every meteor shower.

Experiment

Apparatus

- chair (the right size)
- table (not too small)
- piece of paper smaller than the table
- pen
- slide rule (see your local museum)
- calculator HP15C (see your local museum)

The Trials

Trial No	Experimental condition	Two plus Two
1	both eyes open	4
2	right eye closed	4 / 7
3	both eyes closed	
4	with calculator	4
5	calculator & both eyes closed	no result
6	with slide rule	16
7	with mouth agape	
8	while scratching head	
9	during a boiler room explosion	*explosion explosion explosion explosion*
10	while exiting the building	

Discussion

In this experiment, there were times I did not know I would be able to complete the experiment. With both eyes closed, I almost fell asleep which would have left only two plus two trials upon which to base future work. Fortunately, I did not sleep through the limited time I had access to the experimental apparatus.

Using the slide rule completely slowed down the pace of the experiment which, a short time later, increased frenetically during the explosion. I am sure Union and Division streets meeting had something to do with it. Imagine! a street that divides meeting a street that unites[2]. Dedication to the work led to one more measurement after the explosion, but no more than ten trials were possible.

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[2] Union and Division Streets meet at Queen's University in Kingston, Ontario. Is this a matter/antimatter sort of problem?

Trials 5 & 6 were considered as spurious data, and with good conscience (what's conart?), these were rejected outright. With the remaining eight results being more than adequate for a conclusion, this experiment was a genuine success.

Conclusion

I can emphatically and forthright conclude that $2 + 2 = 4$ plus zero minus nothing. And so ends a successful ground breaking experiment clearing the way for much more complicated experiments such as $3 + 3$, and yes, $4 + 4$. This will be far enough data to allow scientists to make a giant leap for mankind from these small steps[3] to prove that sunsets are red and that the colour of the sky plus the colour of the sun gives grass.

Aplusa

o   Every time one adds $2 + 2$, they should reference this paper. That may be impossible to enforce, but out of professional integrity, I am sure most will comply.

o   Furthermore, as just stated, I do insist on a reference every time two is added to two, but one may feel free to use the format of this report as a guide for their research without further acknowledgement. This report was done with comedic effect intended but also as a lesson to how formal reports should be written. It should also be noted that aplusa is a word of my own invention meaning addenda (pretty impressive eh?).

o   Please do not let the complexity of this work dissuade you from continuing your own scientific work.

o   One last note is that I hope that all the readers of this report will feel free to make their own verification of my result.

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[3] Referring to the words of Neil Armstrong as he stepped onto the moon, July 20, 1969.

The Good Stuff-Alien Math

By Warren Watson
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Did you ever sit through Math class and ask yourself "why do I have to sit through the basics, why can't we get to the good stuff?" Whatever, one does, one has to sit through the basics. Try playing bridge without knowing the basics, and you will never be satisfied with your own level. I strongly believe that even Chateaux en Espagne (Castles in the air) need good foundations, that is why the interesting math that follows is appended to an article on 2 + 2.

Alien math refers to the calculations I have done to estimate how contact with aliens be made using the current conventional methods.

The first part of alien math, is that planets move about the sun in ellipses not circles (eccentricity of zero). Planets that orbit planets, usually called moons, also do so in ellipses (smaller eccentricities than planets and the sun).

The moon was the target of US space exploration and was landed on July 20, 1969. I was watching Superman at the time and knew, one day, we would get to the vicinity of where Krypton was, but realized the moon was a good first and very small step.

The mission was blasted to lunar orbit by a Saturn V rocket in three hours longer than 3 days over an approximate distance of 380,000 km. If a rocket is big enough to sustain that velocity past the poor demoted Pluto (sniff), it would take 162 years to leave our solar system.

The closest solar system that could sustain life is the Alpha Centauri system, 4.37 light years away, seen not too far from the Southern Cross in the southern-hemisphere night sky. The Southern Cross is depicted in the flags of the down-under countries-Australia and New Zealand and the button for this article and the "If We are Not Special" button.

A light year is a measure of distance not time. It is the distance covered in a year at the speed of light. The speed of light is more than two million times faster than Apollo 11. It would take 9 million years to get to possible alien life at the speed of Apollo 11.

Getting a man to visit an alien world seems to be an impossibility, but since radio signals travel at the speed of light, a signal could reach an alien world in 4.37 years if life existed at the star closest to us.

You may think that alien math is trivial, but that is only because you must have mastered 2 + 2.