

Re: Third dimension...

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- *From:* Proginoskes <CHeckman@xxxxxxxx>
 - *Date:* Sun, 04 Nov 2007 06:03:19 -0000
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On Nov 3, 5:23 am, kunzmilan <kunzmi...@xxxxxxxx> wrote:

On 3 Lis, 12:43, Clifford Nelson <cjnels...@xxxxxxxxxxxx> wrote:

In article <1194079190.519857.138...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

kunzmilan <kunzmi...@xxxxxxxx> wrote:

On 31 ?j, 18:52, "jay1b...@xxxxxxx" <jay1b...@xxxxxxx>
wrote:

On Oct 31, 10:28 am, David W. Cantrell
<DWCantr...@xxxxxxxxxxxx> wrote:

What is to the third
dimension as a point is to
the first dimension and as
a line is to the second
dimension?

As I noted in my original
response, the answer should
be "plain" to see.

David

Re: Third dimension...

Well put. Now ... borrowing that...

What is to the fourth dimension
as a point is to the first dimension,
as a line is to the second dimension and
as a plain is to the third dimension?

Regards,
Jay Bala.

When you have a line, you need 2 points to make from it an abscissa.
When you have two lines (parallel), you need 2 lines to make from it a square or a rectangle.
When you have a tube with a square profile, you need 2 squares to make from it a cube.
When you have a tube with a cubical profile, you need 2 cubes to make from it a 4-dimensional cube. Two free ends in the new dimension must be closed, always. Plugs in $(n + 1)$ dimensions have n -dimensions.
Write all vertices of 4-dimensional cube as $(0,0,0,0)$ till $(1,1,1,1)$.
You get 16 vectors giving position of vertices. 8 from them have on the last place 0. They form 3 dimensional cube, the first side of the higher dimensional cube.
kunzmilan

http://en.wikipedia.org/wiki/Gimbal_lock<http://www.hq.nasa.gov/alsj/g...>

From Synergetics: "The specialists brief on brevity is dubious".

Is gimbal lock a hint that the definition of physical space as three dimensional instead of four dimensional is just a case of too much

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brevity by mathematicians?

The reason I ask is that you can define physical space as four dimensional like the Synergetics coordinate system, which is from the tetrahedron, described at:<http://bfi.org/node/574> and a method to overcome gimbal lock uses four dimensional unit quaternions.

And the Pythagoreans might have had the right idea at:

http://kmr.nada.kth.se/files/gok/firstproto/index.php?gallery=Fenomen..._Begrepp/Pythagoras/Misc&image=Number_related_to_form.jpg

Cliff Nelson

Dry your tears, there's more fun for your ears,
"Forward Into The Past" 2 PM to 5 PM, Sundays,
California time,<http://www.geocities.com/forwardintothepast/>
Don't be a square or a blockhead;
see:<http://bfi.org/node/574>http://library.wolfram.com/infocenter/search/?.....son_id=607

I am not sure, what you want. Your publications on internet are not more than 30 years old. I already published my first results in scientific journals before this time. Thus you can not claim priority. Tetrahedrons are only four dimensional planes,

No, they aren't; they are three-dimensional solids. If you take the convex hull of the points (0,0,0), (0,0,1), (0,1,0), and (1,0,0), you get a tetrahedron.

--- Christopher Heckman

only ones from
different n possibilities of multidimensional planes. These planes form complexes. You limited yourself only on one possibility. I was chemist, and I tried to solve some chemical problems. Physical properties of molecules, as boiling points of alkanes can be explained

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using my results, some, and even more important were known even before I was born. Similarly, most of mathematics I use is older than I am. The counting of products n^m as sums of products of two polynomial coefficient was described in textbooks before I rediscovered it and realized its importance.
kunzmilan