THE RESEARCH ON PROPERTIES OF TRIANGLES

A warm welcome to the reader! Thanks for your attention towards this file! Mathematics is such a subject that does not have an end where other subjects employ math in them and have an expected end of an concept. In this field of math, theories don’t only explain the phenomenon but also wide range of natural applications. It is wonderful that they bring out a new link to another concept as well. Although many contributions have been made in the field of science but many feel that proof in math can be done on many methods using different concepts. Intermediate discoveries cannot be said to be only way of expression rather they can be proved using another methods. But not all contributions have not failed so far, friend,direct or point to point concept is said to be only way of expression, I mean usual roots of this math tree.

I have said in the above content about the narrow difference between contributions’ I think that if really naturally an phenomenon in math is true then neither forces can ever prove it wrong. I too want to be parallel and go for the exact truth in this content.

Playing with numbers is not an new thing, but a game with math is like a chance to explore the goat behind the door, in Monty hall’s problem. I see a big set of an equation and after the simplification I get a number that makes the problem different for me.Everthing flipped like a coin. Many of the present day mathematicians never try to explore on traditional math, what we study exactly but go with nature. The olden and golden constants like golden ratio, plastic constant, pi and e.The advanced maths was much difficult for me to understand! The complex numbers, Mandelbrots sets, feigenbaum’s constant and other contributions of Ramanujan take math to the next level.

Dear reader, I too know that toy is too curious to examine my words, but before I want to show about the basic things that we ignore to notice in mathematics. For instance, the trigonometric namely sin theta explains the ratio of perpendicular and hypotenuse. And when it is an right angle, the base is the transversal and both, the perpendicular and the hypotenuse extend as parallel lines. Their ratio is considered as 1 means that both will have the same length when extend indefinitely.brother!but it said, we operate on triangle, means that they will meet at some point, but this contradicts that, they never meet and this cannot be possible, according to parallel lines.

But through formulas, we get 1, but I left a trace of suspense in your mind. If nature agrees with the fact, the equation would always be true.

Let’s assume that they meet, but another problem has risen now.

P2+b2=h2

Replacing them value of h as p then we would get the base as 0, but this contradicts the fact that a triangle had existed before our conclusions.

I never like to detoriate objects and spoil anything, since unusual results are obtained on any aspect of math, I never want to collapse it.

Can’t we rather call it as an axiom or address a term to it that means the same exactly what I want to say

I never create new nor do I get bored

I find whether it is natural or not.

Spotting the point of failure is something improving’s content.currently,inschool we read all the geometry on the 2D plane, in higher classes we would lean the subjects like topology, free spaces, focus on 3 dimensions and of course on spherical geometry.

I never try copy from a source other than my mind and I try my best to either prove or contradict new or existing learnt shapes on triangles with interest. We know less and put a limit on them and pass over other concepts and higher classes’ knew, triangles are of 2 kinds, one on the basis of measure of inclinations and other on basis of their side’s lengths chose the isosceles, the most interesting turn of my observation.

Isosceles properties are quite known but something leaves us unsatisfied, I to felt the same

With the acquired knowledge that with the increase in inclination, corresponding side too increases.

In other words, they are directly proportional to each other.

I kept the common side consistent a while, but changed inclinations randomly, any one at a choice. Each experiment yielded different lengths; a change, I told you before.

I don’t divide the angles by lengths rather, angles to angles and lengths to lengths.

Their ratios were surprising and I tried to test for every angle

And it came true!

From one equation, I can transform it other equations

AMAX=2x, where the value of x is the common side.

AMIN=0, where it also stands the same.

I can express in other ways such as-

k=θ2/θ1=y2/y1

As taking k as υ

Hence, υ

1=Δy/y1………………………………(3)

υ=Δy/Δθ == θ2/θ1­=Y2/y1………………….(2)

υ-1=Δθ/θ y1/θ1………………………………….(4)

So, through other experiments we get this observation.

υ=Δy/Δθ=y1/θ1=y2/θ2=y3/θ3=y4/θ4...Y/θ…………………………… (5)

i also developed an equation later, which is also in this document.

I undertook many experiments which proves the above the above equations. This contribution is small but, this is the base for my further research.

I drew on a 2D plane, and now I want to do the same in spherical geometry too.

Keeping the centre of the sphere be at (0, 0).I drew any two radii and joined them.similarily,I drew other 2 radii. Different from the previous one, join it in a similar fashion.

We record angle subtended between them in both the cases and put it into that equation.

I remind you here, the relation between the above equation can also be stated as-

**(Z2)2Cos**φ**+(Z2)2=(Z1)2Cosφ+(Z1)2**

Dear readers, I here remind you one of my serendipity.

My sphere has 3 degrees of freedom and I have tried much to make this equation simpler. From the first experiment

Ugh! I must say it as serendipity!

The base is well developed, so the other set of equations will go well.

I will not reveal the above bold equation’s derivation and nor its further development.

If you are so much interested to know its further development, see below.-

In Cartesian coordinate system, we generally use the x and y coordinates and in polar coordinate system we use the one angle subtended between the x axis and the imaginary line trough the given point and origin, and the distance from origin.

I started experimenting with the Cartesian coordinates and later on put more emphasis on the polar coordinates system.

I found that the polar coordinate system was convenient to use for me.

I found out it components, and x; y coordinates subsequently.

Then formed another equation-

(Z2)2-(Z2)2cosω= (Z1)2-(Z1)2cosδ

Both the equations the one which I had mentioned above and previous on shall have a change in it.

It is better to replace the symbol (+) or (-) with ‘plus or minus’

One is achieved through the vectors, which is to be used when it is directed otherwise,

The second equation should be preferred.

This will make my part quantitively meaningful.

I shall never reveal the derivation of the above equation even in this content.

This above formula will work on 2d plane as well as in 3d one.

In a sphere, imagine 2 radii arbitrarily taken and they are joined exactly with the segment, followed by other one, and shouldn’t taken the solid angles, rather the exact angle radii. One demerits: If ω, δ≥2 rad.

If this value becomes the above one then this above formula will not work

The sphere has 3 spatial dimensions and 3 degrees of freedom, I want to relate the fourth dimension time with it also.

I am working on the relation of this equation with time...

I have many figures that give an approximation of the above theory.

Due to the common rulers and compass, I was able to create the success of ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_%

This will help us in many ways-

1. In finding the bond angles and to measure distances between the electrons.
2. In math this can help us to proofs, and it can be used in physics as well.
3. It will mainly cover the mensuration and spherical geometry topics.
4. It will also help us to avoid errors in measurement of angles.
5. It will put emphasis on other ideals of math too.etc.