Collective Mathematical Works

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New Formulas for the Trigonometry of Isosceles Triangles

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Abstract: This paper discusses a new formula to solve for the angle of isosceles triangles given proportion of differentiated unequivalent edge length versus the always-equivalent edges. The equation is equal to the arcsine of (X/2) multiplied by two. This formula is to be called 'isn^-1(x)', short for inverse isosceles sine equivalent. Also discussed is the non-inverse 'isn(x)' which is the cyclic function which is determined to correspond as the equivalent of the classic sine formula to isosceles triangles. The formula set is clearly superior and powerful at calculating the angle and measure of any given obtuse or acute triangle of an unclassified type, as well as unifying a simplest-fit formula across all types of triangle. Also discussed are two transform approximation formulas, which help to analyze graphs and samples. Finally, other methods your author has obtained to calculate angles are discussed and disproven in their effectiveness against this article's formulas at focus, as with any other known angle formulas.

Equations:

The inverse isosceles sine, with the inequal over one of the equal edge lengths as x:

$$isn^{-1}(x) = \sum_{n=0}^{\infty}\left(\frac{(2n)!\,x^{2n+1}}{16^n(n!)^2(2n+1)}\right) = \left(\frac{1*x^{(1)}}{(1)}\right)+\left(\frac{2*x^{(3)}}{(16*1*3)}\right)+\left(\frac{24*x^{(5)}}{(16\text{^}2*4*5)}\right)+\left(\frac{720*x^{(7)}}{(16\text{^}3*36*7)}\right)\dots$$

For the cyclic function, i= sqrt(-1) and with isn^-1 angle theta as x:

$$isn(x) = \sum_{n=1}^{\infty}\left(\frac{x^{2n}}{(2n)!} * (-1)^{(n+1)}\right)$$
$$\cong \left(\frac{x^2}{2} - \frac{x^4}{4*3*2*1} + \frac{x^6}{6*5*4*3*2*1} - \frac{x^8}{8*7*6*5*4*3*2*1}\dots\right) \; and: \; 1 - isn(x)$$
$$= \sum_{n=0}^{\infty}\left(\left(\frac{x^{2n}}{(2n)!}\right) * (-1)^{(n+1)}\right)$$
$$\cong \left(1 - \frac{x^2}{2} + \frac{x^4}{4*3*2*1} - \frac{x^6}{6*5*4*3*2*1} + \frac{x^8}{8*7*6*5*4*3*2*1}\dots\right)$$

The equations appear to exponentiate upon the exact values of the angular and proportionate measures for the given notation, though may take large numbers of iterations to become precise.

In solving triangles besides isosceles, one can use isn^-1(x,y) which would be to parse x and y values of a point on the triangle in right triangles. The formula will be discussed with special reference to physics applications on the 'Additional Applications' section later. For using inverse isn isn^-1(a,b,c) to solve an unknown triangle with parts to where c is the opposite side length the angle, θ in isn^-1(x) is defined:

$$\theta = \frac{\pi - isn^{-1}\left(\frac{(a)^2 + (b)^2 - (c)^2}{(a)*(b)}\right)}{2}$$

Also, there is now 'Isosceles Inverse Cosine' ics^-1(x), to solve the angle of any triangle with three known side lengths, in a input-compressed fashion, or to solve such a triangle for 0-360 degrees instead of +/- 180 degrees:

$$ics^{-1}(x) = \left(\pi - \sum_{n=0}^{\infty}\left(\frac{(2n)!\,x^{2n+1}}{16^n (n!)^2 (2n+1)}\right)\right) =$$

$$\pi - isn^{-1}(x) = (\pi - \sum_{n=0}^{\infty}\left(\frac{(2n)!\,x^{2n+1}}{16^n (n!)^2 (2n+1)}\right) = \pi - \left(\frac{1 * x^{(1)}}{(1)}\right) + \left(\frac{2 * x^{(3)}}{(16*1*3)}\right) + \left(\frac{24 * x^{(5)}}{(16\text{^}2*4*5)}\right) + \left(\frac{720 * x^{(7)}}{(16\text{^}3*36*7)}\right)\dots$$

$$...where\ in\ any\ triangle\ besides\ isosceles:$$

$$x = \left(\frac{(adjacent\ 1)^2+(adjacent\ 2)^2-(opposite)^2}{(adjacent\ 1)*(adjacent\ 2)}\right).$$

Additional Applications:

Another series of cyclic functions to be defined by modifications of isn(x) that will calculate and be equal to to proportion from the radius of the graph or angle to the respective x and y components on the cartesian plane is obviously managable from here. They are to be named isx(x) and isy(x).

$$isx(\gamma) = (1 - isn(\gamma))$$

$$isy(\gamma) = \left(1 - isn\left(\gamma - \left(\frac{\pi}{2}\right)\right)\right)$$

In physics, the isn^-1 equation is shown to be used to compute vector combinations and tensors more effectively. It can also be used in pure vector mathematics with ease.

Given right triangles as reference to x and y components plus magnitudes of forces, like so:

$$Given\ force\ or\ vector\ set\ F(n\ forces)\ and\ P's(n\ components)$$

$$of\ any\ vector\ for\ example:$$
$$Px = \{Px(n)\}$$
$$Py = \{Py(n)\}$$
$$Pf = \{Pf(n)\}$$

…the resultant force on a point or object will be given the components:

$$\gamma = \left(\left(\frac{P(y|x)}{\sqrt{P(y|x)^2}}\right) * isn^{-1}\left(\frac{2P(x|y)}{Pf}\right)\right) or\ ...$$

$$\gamma = \left(\left(\frac{P(y|x)}{\sqrt{P(y|x)^2}}\right) * ics^{-1}\left(\frac{2P(x|y)^2}{Px * Pf}\right)\right) or\ ...$$

$$\gamma = \left(isn^{-1}\left(\frac{Py\sqrt{(Pf - Px)^2 \ + (Py^2)}}{|Py| * Pf} \right) \right) \ and \ldots$$

$$Fx = \left(Pf * \left(isx(\gamma) \right) \right)$$

$$Fy = \left(Pf * \left(isy(\gamma) \right) \right) \ so\ that \ldots$$

$$The\ force's\ angle\ equals:$$

$$\theta = ics^{-1}\left(\frac{Fx^2 + \sqrt{Fx^2 + Fy^2}^2 - Fy^2}{Fx * \sqrt{Fx^2 + Fy^2}^2} \right)$$

$$\ldots and\ its\ magnitude\ equals:$$

$$\sqrt{Fx^2 + Fy^2}$$

This proves that the theorem is effective in calculating dimensional components of vectors in a vastly alternative and simplified method. Positive and negative x values are right at hand in this setup, while y values must be differentiated. This at least preserves the symmetry of the reference dimension and, using corresponding signs for if the angle to a radian is negative, one can obtain full 360 degree coordinates, or adapt the formula to more advanced purposes. Less formulas by far are needed for calculation of geometry and physics with this vector method, and the calculations can be put in one piece with less external operations or operators.

A calculation for the ideal circumference of the perfect circumscription of a known SSS triangle can be done as follows, where variable 'side' varies from the longest to shortest side of the triangle for the calculation of the correspondent circumscription, semiscription, or inscription:

$$x = \left(\frac{(adjacent\ 1)^2 + (adjacent\ 2)^2 - (opposite)^2}{(adjacent\ 1) * (adjacent\ 2)} \right)$$

$$C = \left((\pi + |isn^{-1}(x)|) \right) * side$$

Additionally, the ratio of a circle diameter to circumference PI = 3.14159… can be calculated using the infinite series simplified from isn^-1(x):

$$\pi = \sum_{n=0}^{\infty}\left(\frac{(2n)!\,2^{-2n+1}}{(n!)^2(2n+1)}\right)$$

$$= \sum_{n=0}^{\infty}\left(\frac{3*(2n)!}{16^n(n!)^2(2n+1)}\right)$$

One more theoretical set of expressions which works best using isn^-1(x) is the set which produces the average of all angles of x->y and x->z, as well as the one with the average of x->y and y->z, in a set of points within an object in equidistant and regular conditions. The average value of the sum pairs of these angles respectively condense unique irrational numbers that vary across a set of possible values based on the scale, rotation and perspective of an object or region in a graph. The single value produced by the set makes it possible to correspond a single number of many decimals to an expansion that reproduces the graph of the object, and in the latter case may be able to locate the object by its center of point sample density when it is part of a larger equation. This method relies only on the average of the sum of the defining angles to a region R at its perspective, the equation and process can be expressed as:

$$Graph(x,y,z) \ = \sum_{x,y,z=(x_1,y_1,z_1)}^{(x_m,y_m,z_m)} \left(\frac{(isn^\wedge-1(x,y)+isn^\wedge-1(z,x))^{\sqrt{x^2+y^2+z^2}}}{m}\right)$$

To get the graph back out from that number the calculation may be something like this:

$$Graph(x,y,z,V) \ = \sum_{n=0}^{inf.}(\langle isx(nV)|isy(n^2V)|isz(n^3V)\rangle * isn\left(n^{(1|2|3)}V\right) * V)$$

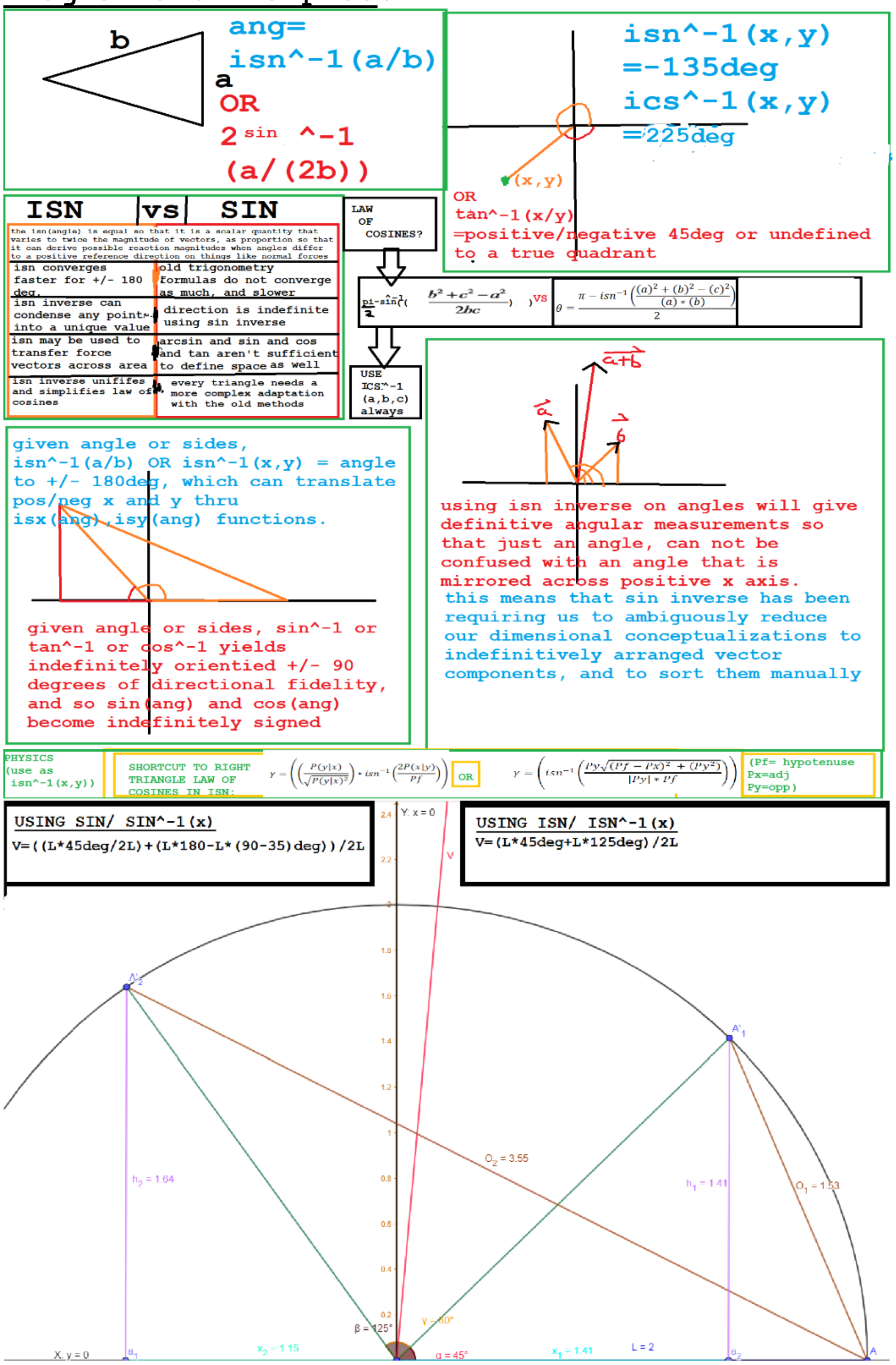
Where m will represent the number of x,y,z coordinates to fill the region that are used as a 3-dimensional list.

Simply put, this method will return irrational numbers that correspond uniquely and identically to one particular graph with optional transformations.

One other transform to reveal roughly the approximate harmonic signature of a series of samples represented as f(x) in terms of isn(x) frequencies(x) and amplitudes(y), and letting k represent the number of recorded samples of f(x):

$$Harmonics(f(x)) = \sum_{n=0}^{k}\left(\frac{isy(f(n)*x)*(\frac{k}{x+n})}{k}\right)$$

Diagram and Examples:



Discussion:

The isn, isn^-1 and ics^-1 formulas provide a unifying method whereat it is optimally easy to solve any other type of triangles (in relation to the relative component of the positions or sides of the adjacent points to the angle). The sin and arcsin methods are specific to components and do not provide method to solve other triangles in a way where the modifications are significant to accessible properties of the triangles.

Since no other formula has the proper blend of consistency, reflexive clarity and ease with calculating all types of triangles, and this formula is computationally superior for obtaining transformed physical predictions and simulations as well as data on geometric systems, ics^-1 ought to be used as a unifying trigonometric equation in the process of relating expressions and triangles to each other or their other measurements. it may very well be the superior method of calculating any type of triangle from an educational and computational perspective, as well as from a standpoint in search of algebraic abstraction of geometric properties.

Another method related to these equations as well as arcsin, whereat the 16^n at the denominator of the sum series expression may be substituted for 64^n. This results in a equation, that is equal to 4*arcsin(x/4) or 2*arcisn(x/2). The formula is so that f((+/-)4) is +/- (2*pi). One can theoretically abstract equations where adaptations of side lengths of any triangle be added in to solve for each, and the coordinate system can shift to handedness-biased +/- (2*pi radians, or 360 degrees). This requires extra factors, operations and calculations, and larger numbers to proportionate and converge on the answer. Conversely one can use the arcics function defined in this paper to handedness-relative convert a simulated rotation point to +/- 2*pi radians as well, and this is shown to work just as well if not better. For geometric and mathematical reasons, there is no reason to set a default measure so that the size of the number for an angle jumps randomly upon a full rotation. Simple left-and-right correspondence for half-circular rotations at a maximum of pi radians is much more effective for the person doing calculations. The major reason for this is because it is not relevant to as many forms of physical or theoretical geometry to suppose an ultimate direction or handedness of rotation for which an angle measure constantly increases in relation to any (or simply none at all of) references. Because angles are always relative, they should be so relative in any direction symmetrically to a reference direction. This is so that, for example, inverse isn formula can describe with definition a 3d angle from a reference origin and dimension, and any two chosen angles (between +/- pi) will always yield a single possible direction given the dimensions. The formula with 64^n at denominator would be yielding handedness-correlation issues which breaks the fundamental concept of graphical geometry and at least half of the possible +/- (2*pi) range directions made from two angles will be an ambiguous point, whereat the calculation could have been made in two different ways or represented by two different numbers. This breaks the uniqueness and mathematical value of otherwise unique graphs. Not only this, one final example is that, if the reference direction were changed to a different perspective on an objective with a reference point p and direction, some angle, such an angle would be entirely ambiguous to express in which way it has rotated if we are to assume a difference in rotation can imply not just a transition from the original angle. It would then be measured with respect to some fundamental and sometimes unknown coordinate, in the 64^n denominator case. Ultimately it will not be educationally better to use arcsin or the 64^n denominator case, nor technologically or in terms of efficiency or anything. This calls for the following ultimatum, that these isn, ics, etc. formulas are superior than any other possible way and should not be substituted or ignored.

Summary:

The expressional components of 'ics^{-1} ready' triangular conversion coefficients for proper angle calculation are more universally supported by this formula than the $\cos^{-1}$ theorem can rationally express to, making it computationally superior for closed systems and computing large networks of geometrically or mathematically bound variable systems that would correspond to everyday applied mathematics. Using a simple script and algebraic rules every geometric and physical formulation may be given a uniform distribution and ease of reference between different theorems, potentially simplifying together series of expressions in systems that are closed or of high complexity, not easily possible with sin or $\sin^{-1}$ on an input or any scale of algebraically easily transformable level. It is suggested that many computational systems and graphing calculator make an easy use of this function or its generated dataset and its conversion utilities for a geometric, spatial or coordinate network.

Data Availability Statement, and Conflicts of Interest:

The data and calculations generated during and/or analyzed during this study were done by hand or graphed in GeoGebra with permission from the relevant copyright or license holders. Due to the fact that any standard calculator or convergence test will readily yield the results which are claimed in this text, they are readily available from the corresponding author on reasonable request.

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Postulate of Time as an Imaginary Dimension(s), Physical Space as Real Dimensions, and the Behavior of Negative versus Positive Numbers

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Postulate: Imaginary dimensions are correspondent to time or chronological phenomena, where mathematical points and data are the conceptual real physical architecture encased, to be used to model reality as experienced. Additionally, negative numbers have long been thought to multiply to form positives, but mathematics is more easy as a whole when negative values always multiply to negatives, and are equivalent to positives save that the product between a negative and a positive is imaginary and thus both positive and negative. This proves that 3-dimensional reality is completely objective to infinite numbers of practical dimensions because they will always inherently simplify to three.

Evidence:

Point and function derivatives and integrals are logically symmetrical in/ex – trusive analysis of points on a graph. Logical series coordinate through time in a complex manner. Physically, it is deterministic that a major degree of time is to provide fragmented dimensional components with real and imaginary parts against each other or in systems in different parts of reality. Time is always the imaginary part of these functions, spatial dimensions are real and non-conformational, though time is an overarching container for these expressions. **Time therefore is not a line, number or dimension in itself: it is just the way things go.**

The reason that infinite dimensions nonlocalized and imaginary simplify as the best answer to space as effective 3-dimensional reality is true, is because while n numbers of dimensions imply n numbers to navigate space, any two objects of n dimensions have no way around each other except for because of the concept that there is theoretically a way around each direction, which therefore can be taken so that dimensions of reference + another dimension exist now that can be transcended for any dimension regardless of direction. But then, you have acknowledge that any (# dimensions) >= 3 n dimensional object does technically have one area whereat it can encase an n-1 dimension and doesn't even necessarily orient identically to its own relative correspondent depth axis, solely based on the logic that an object which has n-dimensional solid object can navigate across and have of measure a relative volumetric quality of another equal object. So a reference + depth + transcendental direction will always effectively result as an effect, to equate or analogize 3-dimensional experience. To have a shape which conforms on infinite dimensions or subinfinite, still implies a concentric space whereat it is true, a theoretical depth where it has a size which is numerical, and then a theoretical plane whereat it can navigate universally except for when it conflicts with the position of an equal. Realistically this implies the reason 3 axes adequately describe all space yet the dimensions can be much more enumerable and universal. They simply exist as 3 or less dimensions at any point in time, and to say that an object is less than 1 dimensional means it can have no better definition than zero/a point only because it has no more a way to define, navigate or refer to something of +3 dimensions to it.

Further Abstract Conclusions and Operator Theory:

In addition, negative numbers have long been thought to multiply to form positives, but mathematics is more easy as a whole when negative values always multiply to negatives, and are equivalent to positives save that the product between a negative and a positive is imaginary and thus both positive and negative. This can easily be tested and this methodical procedure simply requires less assumptions, while retaining the simplified functionality of all major applied mathematics functions and formulas. That is to also imply that:

1. +/- symbols as operators are directionally biased to add or subtract from the relevant direction of the handedness of graphs, so that adding two negatives produces further negatives, while subtracting a positive from a negative will add its value back towards/through zero.
2. Exponential graphs and radical graphs are to be considered for in that the signed power/root is simply going to become ambiguous when different, but treated as if it were as we currently see a positive root or power to a positive number, and the result is always the same, positive or negative, with the exception that the result

is indeterminate and imaginary(positive and negative) when the signs are on either hand, different.

Then, we can derive theoretically a variety of useful logical workarounds to achieve some of the other graphs we were more familiar with using the old style of numeric negativity:

a. (-1/(-x)) will result in the value -1/X, (+1/(+x)) will result in the value 1/X, but if the signs are different they will result in the consequent proper-sign (+/-)X/1, and the net absolute can be taken to result in graphs such as the continued 2^x, in the expression now absolute |-1/(2^x)|.
b. Multiplying a graph by (+/-)1 or other values, or even the symbol itself, can result in the negative or positive side of the graph flipping its orientation while the other stays the same.
c. We can then assume 0*0 is equal to 1 as well as 0/0 can equal 1, which fixes a hole in the logic behind factorials such as factorial 0=1. The factorization of zero is infinite but also empty but can equilibrate logically to one. 0*0 or 0/0 can also equal 2.
d. The imaginary number unit, i, can be supposed to simply alternate between positive and negative one in any power expression, with even numbers being the negative side unless i in parentheses is negative. To simply multiply by i would result in both positive and negative numbers.
e. Geometrically because dimensions simplify to three and numbers may be on a certain small-as-can-be scale in a grand unified theory, *for (+/-)adding and subtracting numbers, for any value v and 0<=number n|v<=1*, n(+/-)v = (positive or negative) n (+/-) v(+/-)n|v(+/-)1. For *1<=number n|v<=2*, n(+/-)v = (positive or negative) n (+/-) 2 (+/-) v. *2<=number n|v<=3*, n(+/-)v = (positive or negative) n (+/-) 3 (+/-) v.
If n|v above 3, n(+/-)v = (positive or negative) n (+/-) 1 (+/-) v.
f. Possibly and at a geometrically inclined level to the last listed postulates, in dealing with the ease of calculation of values and such complex space, we can assume that when we are taking the dividend of a number by another number between absolute 0 and 2, the result may be more accurate for number theory and extrinsic, higher-value number theory

application when the result is taken by a subtraction of the difference from the value subtracted by the correspondent signed value from that signed value. So 1/1.5 = 1-(1.5-1). *This has implications for units in applied math, however*: This implies that units compared across each other should be measured by individual quanta as a base numeric input (i.e., not to scale amps by a number of electrons per second as a base input, count each electron) except when the quanta is scalar, can be given decimals, and not counted in a quanta-based fashion (such as when force blends into other forces and there is no definite natural quanta). Inverses are seldom used for exchanging non-(restrictively natural) number variables in applied math, anyways. When taking the inverse of a value above two, the symbolic notation may be easier for many forms of applied math to note the decimal part of any number greater than 2, or |n|-infscale(|n|+1/(inf)), or the rounded down value, to be summed as the inverse of the decimal fraction in itself as a type of adjacent component to that inverse. So, 1/2.5 could be written as 0.5 {0.5} or one half plus the decimal {0.5} in brackets or any other symbolic notation. Then to get something like the inverse of 6.333, .1666 {.333}, we can add the {.333} to any multiplied result of the inverse and add the value of .333 multiplied to the result, say 44.333= 7*6.333 = 7*1/(.166 {.333}) = 7*(1/.166 = 6) + 7*.333 = 44.333 of the integer part. To divide such value as 9 by 5.25, you can express: 9*1/(5+{.25}} which equals: 1.714… by doing 9/5 = 1.8 and divide the value again by 1+(.25/(5)), which is 1.05, and it is so that 1.8/1.05 = 9/5.25 = 1.714… and this works for all numbers. This is the simplest algebraic proof of division and multiplication but it implies that dividing 1 by a number between 0 and 1 should result so that 1/0.5 is equal to 1/0=inf, then divide the result by (1+(0.5/1)), then divide (inf) by 1+0.5/1. This obviously does not work and it is the only case this simplest proof can not work. So I prescribe that we can also assume that the inverse of values up to and including two be expressed as 1-(n-1) so that 1/0 can equal 2, and then you can divide that by 1.5 and you would get 1.333… which is still not exactly the inverse. This would still just be the common accepted inverse of

1+0.5 plus two times the difference from one, and that is far from what we want. Though, we can say the value of the inverse of 0.5 is either 1.5, or 2 because two is another natural number away from one which we use to define the inverse operation. This means values between 0 and 2 can have multiple inverses, or they can invert to form the inverse of two or more numbers if they are to be less than or equal to 0.5. The case where the inverse can be three numbers is 0, where it can be infinite, or 2, or 1 since you did not divide one by anything. To fix things further, because of the ambiguity of the multiplicative values below and above one, and for the fact that the scale of values from 0-1 and their inverses at 1-2 would otherwise be on a curvature that makes little sense to the difference of 1 to 0 and that before 2 there is no reference to the relative value of 1 as a real number, values below 1 which are to be inversed selectively as their difference from one across one to two, should be so that multiplying a value by a number less than 1 but greater than 0.5, and selectively down to 0 if the inverse is selected in 0-2 mode of function, will equate so that it is the same as dividing the value by 1 plus the difference it produces from 1, which is not the current convention of inverses. This postulate states it is so that, for any 0 <= a <= 1 which represents an inverse of a value 1 <= b <= 2 which is equal to 1+(1-a), the expressions are a*x = x/(1+(1-a)) and, b*x = x+x*(1-a), likewise x/a = x*(1+(1-a)) = x*b = x/a and x/b = x-x*(1-a) = x*a, which should actually be consistently the same difference across any numerator or factor for a or b, for whether a or b is a factor or denominator. This is all to save for when selectively we decide to use a value that is anywhere at or below 0.5, whereat it can be used as an alternative inverse to any value above 2. This means that the inverse of a value below or at 0.5 means both a value above or at 2, or simply up to two on a linear scale. *Any two values above 2 can still be used to create alternative possible fractions between 0 and 2, but their inverse pairs are one-sided and you cannot recover them back out so they are to represent an inverse of two numbers 0-2 unless you want to recover the original larger values with an extra variable.* To conclude this list entry, for any n <

1, to multiply it to number n to represent itself as a product of the operation for an inverse, and not a unique measurement, means to add its difference above 1 and divide the value it is effecting by this value. This is so that 1/1.5 = 0.5 and 0.5 * n = n/1.5 OR n/2. Then when you divide a number like 6 by a number like 3.333, you can say that 6/(3 {.333}) = 6/3*(1-.333/3) = (6/3)/(1+.333/3) always, as a decimal divided by any real number becomes smaller, and is always smaller than one. This should be always true and intrinsically translative for subsequent applied uses of such an inverse number.

g. To divide any number by a value that is or is the inverse of a number not bound to become higher than 2, most cases you would only subtract the difference from one, so that for in division any number x divided by number n while 0<=n|x<=2: x/n = 1(+/-)(n|x)(+/-)x/n, and for values 1<=n|x<=3: x/n = x/n(+/-)(x|n). For values *x|n above 3:* x/n (+/-)2(+/-)x|n. value as an addend.

h. When multiplying numbers where both are not intrinsically calculated by inverse (dividing one) operations, a similar rule will follow: for 1<=x|n<=3, n*x = n*x(+/-)(x|n). For any value 0<=x|n<=2, n*x = x*n(+/-)1(+/-)(x|n). For values *x|n above 3*: x*n = x*n(+/-)2(+/-)x|n. If the second value besides x, labeled n, is within either of these ranges, take the rule for the higher number. Remember multiplying values between 0-2 will still also imply the difference from one is positive or negative towards that number direction. This way, however, if there is at or more than three values being multiplied, you should disregard this rule and perform the operation as if they were inverse or compressible to 0-1 values and as such simply multiply them without assuming this mechanic, but always add a single value of one to the end as in 1<=x|n<3. If one is already added this can be ignored.

i. As far as powers are concerned, we can consider the true value of a power p, not to be mistaken with the power scaled by the sum(2,p,n)*n interpretation of powers of number n, according to and supported by other articles in this book, to be equal as: n^p = ((**[in series]**(0,infscale(p),n))*((infscale(p)-infscale(p-1))+n*(p-infscale(p))-(p-infscale(p))))). |n|>3. If 0<=|n|<=3,

n^p = 3(+/-) (n|p)(+/-)((**[in series]**(0,infscale(p),n))*((infscale(p)- infscale(p-1))+n*(p-infscale(p))-(p-infscale(p))))).
For values above 3 use the normal definition of n^p but add or subtract or multiply or divide by the value 3 as well as p|n. Infscale(x) is defined as the lowest adjacent integer to any possible number with decimals, with the exception that if x is an integer it is absolute x-1.

j. At that case where you want to find roots, the nth root value of x would just be:
n-(n*(**[in series]**(0,infscale(p),1/n)*((infscale(p)-infscale(p-1))+(1/n)*(p-infscale(p))-(p-infscale(p)))), |n|>3.
<u>If 0<=|n|<=3,</u>
root(p,n) =
3 (+/-)(n|p)(+/-) n-(n*(**[in series]**(0,infscale(p),1/n) *((infscale(p)-infscale(p-1))+(1/n)*(p-infscale(p))-(p-infscale(p)))).
For values above 3 use the normal definition of root(p,n) but add or subtract or multiply or divide by the value 3, as well as p|n.

The last rule that would be added to this set of adoptions to be termed as ‘effective’ ‘actualitive’ or ‘causational’ mathematics are of special cases involving the number zero. If a number is a power or root multiple or dividend, addend or difference of zero, which all numbers technically are, in order to have gotten to this number through a numeric operation, you can now additionally add/subtract, multiply or divide, or use powers and roots to so many of such operations of such a value as 0=any decimal=1=any number=infinity. This is to imply all numbers can access each other in infinite ways and extend each other to infinity.

If all of these rules are followed you can assume numbers can be symbolized by four sets of three lines arranged in various conflicting/nonconflicting directions, and optionally intersected between their connections with up to four grid lines to total up to sixteen sets of counted value, and you can orient them with lines or colors that can connect them and use the relationships of these six major mathematical operations in their degrees of increase/decrease intensity to symbolize equational dynamics. It’s recommended to use no lines whatsoever but draw a box for variables. This is more or less the way symbols are done in your author’s language for ease.

When all these assumptions are held to, factoring a root value of any equation is as simple as this: if a polynomial of any degree or form is to equal to 0 at any point, those points can be found in conjunction by the use of the value 2 in place of x and to perform a operator-inverse calculation of the relevant values in this fashion: for addition, subtract and for subtraction, add. For multiplication, divide and for division, multiply, and for each term that multiplies or divides in succession with another of such a term, perform the same reversal on top of such multiplication and division directionally. Then, if there is powers and roots, reverse them but reverse them again on the opposite side of any division or multiplication that they are factored to. Preserve factors and non-variable numbers and put them in their respective places. Then for everything added or subtracted, remember they can be initially positive or negative at any point so multiply these terms individually by i.

For more inquiries, See the logical correspondence of any function, sequence or logical construct as a whole to be continuous of a logical degree, and that an imaginary number – rooted reflection of the trend to be identical to only a possible and self-sustaining neutral symmetrical system, or else a real logical cyclic phenomena. This is aligned to the structure and behavior of matter, or the logical order of any system of mathematics with sub or consequent derivatives (or removals from) or integrals (or additions to) of or without any mathematical systems, or any modifications thereat, especially those designed to model real systems we currently perceive. Such as for the case where the unit of a particular integer has a true spatial and metric meaning for any given circumstance and so as things scale in the physical or logical reality by these numbers being used, more rules apply to their behavior based on the assumed circumstance.

The scalar behavior of numbers when their values are infinite

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Postulate: *The assumption is that because decimals terminate at what is infinitely small and they represent the set of possible integers, the correspondent scale of numerators to the denominator of infinity in increments is digital and no longer accounts for decimals. That said, an equational graph with a numeric method which equates the rounded value of X is used and the integrals and areas from 0-x of the graphs is to be postulated, with the proportion of adjacent slopes, to be the related to the relative geometry of infinitely large values inverses with respect to their multiples and regular numbers as they are physically measured. While computers and calculators may express the value of (x*(inf))/(inf) as equals to y=x, it is just as simple to equate infinite values using this relationship and derive potential statistically accurate substitute values in typical algebraic limits of undefined points. The next section includes proof.*

Equations and proof:

$$Because:$$

$$\left(\frac{x}{k}\right)^{\infty} = \left(\frac{x}{k}\right)\infty = \infty \; if \; k < x; \frac{1}{\left(\frac{x}{k}\right)\infty} \; if \; k > x; \; 1 \; if \; k = x \ldots$$

$$This \; means \; that:$$

$$infscale(x) = \sum_{k=1}^{\infty} \frac{\left(\frac{x}{k}\right)^{\infty}}{\infty^{\left(\frac{x}{k}\right)}}$$

$$= \sum_{k=1}^{\infty} \frac{\left(\frac{x}{k}\right)^{\infty}}{\infty * \left(\frac{x}{k}\right)}$$

$$infscale(x) also\ equals:$$

$$= \sum_{k=1}^{\infty} \frac{\left(\frac{x}{k}\right)^{2\infty}}{(2 * \infty)^{\left(\frac{x}{k}\right)}}$$

$$= \sum_{k=1}^{2x} \frac{\left(\frac{k}{x}\right)^{\infty}}{\infty^{\left(\frac{k}{x}\right)}}$$

$$Infscale(x)\ can\ be\ presumed\ to\ equal\ the\ scalar\ value\ of$$

$$x\ as\ a\ multiple\ of\ infinity\ if\ 1 = \infty\ because\ \dots$$

$$If\ the\ operators\ of\ infinity\ in\ this\ equation\ are\ a\ finite\ number,$$

$$the\ equation\ functions\ to\ produce\ repetitive\ infinite\ sums$$

$$converging\ from\ equalling\ to\ the\ formula$$

$$y = x\ when\ \infty = 1$$

$$and\ as\ 1 = \infty\ we\ see\ it\ becomes$$

$$the\ rounded\ value\ at\ x.$$

The equation technically converges with high precision when the sigma iterations, the power of the numerator and the base of the denominator are all adjusted towards inf. exactly from infscale([-1<x<1]); but since infinity has not been quantified and its power principle of itself as a base is multiplied by an infinite power, it is theoretically an always-infinite power even when inf. is put to the first power; since infinites may be an undefined set whereat the relation 1*inf != infinity because 1 is technically 1/inf to infinity. This implies we can safely use computational space to refer to infinity as a relationally infinitely scaled set of possible numbers and thereby it holds relational properties whereat infinitely small decimals may count up as integers when scaled linearly by inf.

Because any possible numeric substitution for inf. as a power to a number is quantifyably a decimal to infinity as well, numerically we can relate powers of infinity to the integer-power infinite roots analogy and vice versa, and find that only scalar proportions n/inf. can be multiplied by inf. to achieve a realistic numeric value that is finitely expressible. Therefore without implying infinite zeros after ever decimal notation, you cannot effciently imply sub-decimals(i.e. 3.5.2) as a true number as the process is redundant.

In mathematics the scalar identities of sub-decimals would be consequent divisions of infinity; and when used in operations with infinity can yield new numeric methods for the potential geometric establishment of new number construction processes for infinitely large or small numbers, and expanding them to integer analogies later. In the geometric theory this is to imply infinity as a transcendental number that still posesses geometric properties on our numbers when certain rules are applied to arbitrary calculations that use it, since inf. is not previously able to be expressed or used as a true number value in computers. It would also be the only number not allow for algebraic simplification.

This allows us to conclude that scale(x) is the representation of all possible numbers when $x = \infty x$.This is probably because decimals are infinitely small when compared to their whole values when x is divided by infinity, or when 0-1 is expanded as the range of possible integers by their order of magnitude.

Technologically, numbers from the derivatives or integrals or other transformations of this formula may reference to significant numbers in certain spatial or transformational sets, which can be assistive or relevant in geometrical problems, especially when given to simulate or emulate infinite variables.

An application of infscale(x):

This equation will give theoretical zero limits or zero values at only positive prime numbers:

$$\sum_{n=1}^{infscale(x)} ((\frac{x}{n} - infscale(\frac{x}{n}))! - (\frac{x}{n} - infscale(\frac{x}{n}) - 1 + (\frac{x}{n} - infscale(\frac{x}{n}) - 1)!)!)) - 1$$

Study on Novel Geometric and Numeric Methods

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Abstract: *This paper discusses a variety of newly discovered numbers that have unique properties in algebra that may have interesting applications in geometric and mathematical problem-solving, as well as exhibit plentiful beauty in their self-structured relational patterns.*

Introduction:

Numbers that uniquely possess logically simple algebraic properties that pertain exclusively to themselves are discussed in this paper. The properties are expressible as simple logical equalities where a transformation of the number involved in a simple or common way results in a concurrent transformation of the same number by an alternate route, or in general a relationship of the number to itself that exhibits an increased self-reference when compared against other numbers.

Here is the list of numbers and their values, along with their defining properties which make them special found in the next section:

T = 1.8795…

L = 1.8393…

P = 1.813…

S = 1.7768…

D = 1.7549…

J = 1.7569…

I = 1.7286…

O = 1.7221…

o = 1.6938…

H = 1.678…

X = 1.6603…

Q = 1.63960…

E = 1.5652…

Z = 1.5549…

K = 1.5204…

N = 1.4966…

Y = 1.4656…

W = 1.4534…

F = 1.44138…

r = 1.4364…

f = 1.4343…

B = 1.38152…

A = 1.3660…

U = 1.3392…

M = 1.1975807343…

C = 1.2488…

G = 1.1993…

m = 1.19743…

R = 0.4759…

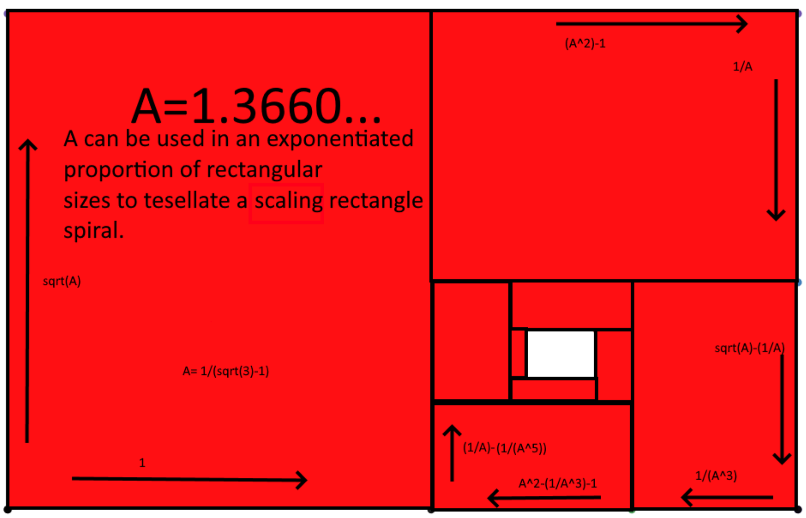
V = 0.4360…

n = 0.2324…

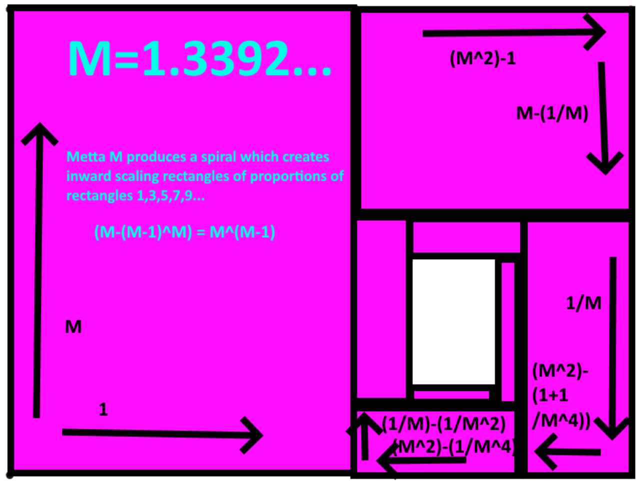
Findings:

These numbers discussed in this paper, referenced in the above section, have a variety of properties which are likely to help to formulate various mathematical equations in alternate ways. Their properties are of intense mathematical beauty in the opinion of your author.

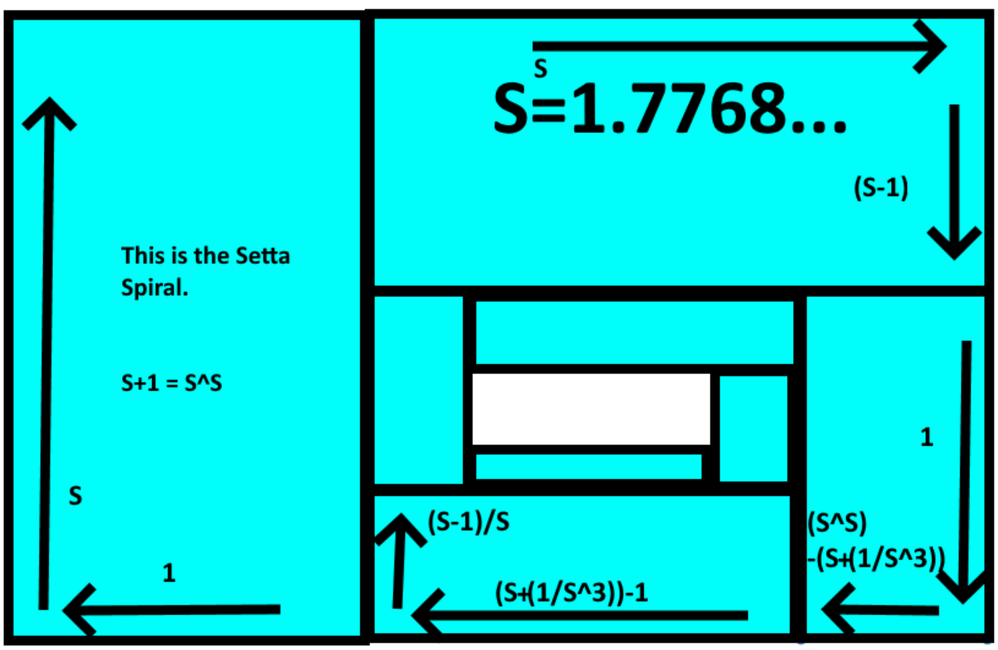
Noted, some of these identities have strange and potentially useful properties – and, despite being hard to calculate by hand, they have relations that make them easy to find and exact with just a calculator. In various numeric systems, it becomes easy to wonder if these numbers can have implementation in shortening long calculative processes through logical 'loopholes,' or substituting expressions with ones of their own archetype. They can also make perfect geometric patterns or hold a root in geometric problem solving. One good example is Atta A, a number that equals (1/(sqrt(3)-1)) and generates a perfect scaling rectangular tessellation:



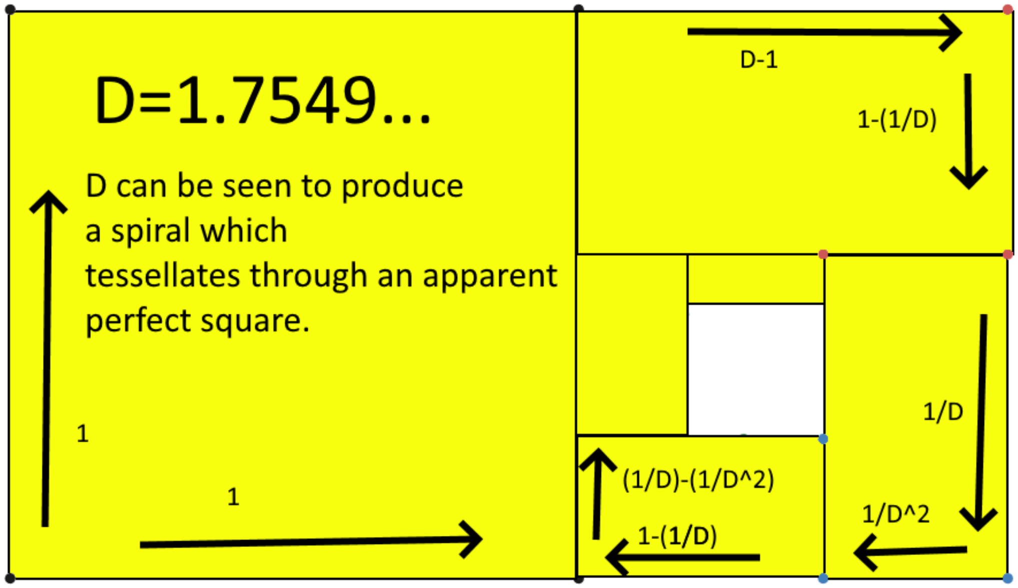
Another example is the spiral for Metta M, which spirals through a series of rectangles scaled by the first, third, fifth and so on rectangles:



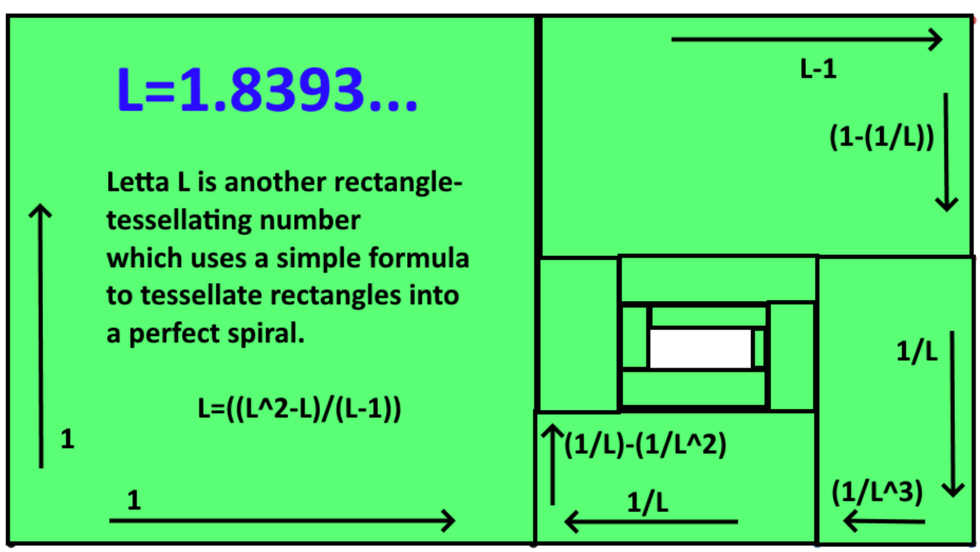
Another example is the spiral for Setta S, which spirals through a series of alternatedly arranged logical statements for its side lengths while maintaining a repeating order of vertices for rectangles in a tessellation:



Another example is the spiral for Detta D, a number with a plethora of properties, which spirals through a perfect square:



One more good example is Letta L, a number (not first discovered by the author, known collectively as the Tribonacci Constant) that, with its inverse is a root, or the zero-value of the equation of ((X^2-X)/(X-1))-X and generates yet another perfect scaling rectangular tessellation:



This paper will detail to you the values and properties of each of the respective numbers. They may be subject to be used in the calculation of natural progressions, processes, and geometrical relationships. These numbers may possess properties that can, much like words in a language, simplify modern mathematical operations used in conjunction, by offering substitutions and simplifications and alternate constant-based methods to express other forms of logical transformations of numbers. More effort is required in investigating into the functions of these numbers, but their general importance and reasons for consideration are evident in the properties of the numbers herein listed, expressing the properties which can simplify or substitute for mathematical transformations where they are harder to write into an equation:

The properties of the previously listed numbers will now be explained here:

Let number Meum M satisfy the equation:

With two other numbers as additional solutions:

((M-1)*M + (M-1)*(1/M)) = (2^M)/(M^2) - M

…so that, For any number n:

((2^M)/(M^(N+1))) - M^(3-N) = (M-1)/(M^N)

((3^M)/(M^(N+1))) - M^(3-N) = (M-1)/(M^N) + 1/(M^(N-1))

A few very closely calculated numbers that are within a ten thousandth or two of Meum hold:

(M-1)^M + (M-1)^(1/M) = (2^M)/(M^2) - M

((2+4*M)/(4M-2))-M = (1+(M-1)*M)

(3+(3*(2*M-1)))/(3*M+3*(M-1)) = (M^3)

Let number Etta E satisfy the equation:

(1-(E-1))-(1/E) = E-(1/(E-1))

Let number Atta A satisfy the equation:

(A+1)/A = A+(A-1)

(1/A)-A = (1-(A-1)

Let number Ketta K satisfy the equation:

K^K = K+(K-1)^K

Let number Utta U satisfy the equation:

U-(U-1)^U = U^(U-1)

Let number Wetta W satisfy the equation:

1+(W-1)^2 = sqrt(W) = 1+((W-1)/(sqrt(W)+1))

Let number Zetta Z satisfy the equation:

Z-(Z-1)^2 = sqrt(Z)

Let number Fetta F satisfy the equation:

F = (F+1)/(F^F)

Let number Yetta Y satisfy the equation:

Y^2 = 1/(Y-1)

Let number Tetta T satisfy the equation:

T^T = (T+1)/(T-1)

Let number Metta m satisfy the equation:

((m^2)/2)+1 = m^3

Let number Detta D satisfy the equation:

(1/(D-1)) = 2*(D-1)

(1/(D-1))-1 = 1/D^2

(D-1)^2 = 1/D

D^2 = D+(1/(D-1))

D = (1/(D-1))^2

D+1 = D*(1+(D-1)^2)

Let number Itta I satisfy the equation:

D+1 = D*(1+(D-1)^2)

Let number Cetta C satisfy the equation:

$(1+(C-1)^2) = (C/(1+(C-1)^C))$,

$(1+(C-1)^C) = (C/(1+(C-1)^2))$

Let number Retta R satisfy the equation:

$(R^R)/R = R+1$

Let number Vetta V satisfy the equation:

$V/(V^{(V+1)}) = V+1$

Let number Rutta r satisfy the equation:

$1/r = 1-(r-1)^r$

Let number Hetta H satisfy the equation:

$(2^H)/(H^2) + H = H^2$

Let number Xetta X satisfy the equation:

$(1/X) = 1-((X^{(X-1)})-1)$

Let number Letta L satisfy the equation:

$L^2 = (L+1)/(L-1)$

Let number Getta G satisfy the equation:

$((G-1)^G)/(G-1) = 1-((G-1)/((G-1)^{(G-1)}))$

Let number Petta P satisfy the equation:

$(P^{(P-1)}-(P-1))*(1-(P-1))*P = \mathrm{sqrt}(P)$

Let number Setta S satisfy the equation:

$S+1 = S^S$

Let number Jetta J satisfy the equation:

$J^J = (J-1)^{(1-(J-1))}$

Let number Otta O satisfy the equation:

$O^O - (O-1)^{(1/O)} = O$

Let number Outta o satisfy the equation:

$o/(o-1) = o^o$

$(o^2/(o-1))-o^o = o$

Let number Netta N satisfy the equation:

$N^N - ((N-1)/N) = N$

Let number Futta f and Nutta n satisfy the equation:

Both are roots of the equation:

$(1/(1-(1-(1/X))))-(1-(X-1)) = (1+(1-(1/X))-(X-1))$

They also relate by:

$(1-(1/f))+1 = 1/(1-n)$

$(1/(1-n))-1 = 1-1/f$

$1/(1-(f-1)) = 1+(1/(1+(1-(1/f)))$

Let number Quetta Q and Betta B satisfy the equations:

$1-(B-(1/B))=(B^B)-1$

$B^B-(1-(B-1) = 1/B$

$Q^Q - 1/Q = Q$

...and with any number n:

$n*Q^Q - n/Q = n*Q$

$(n+1)-(B-(1/B))=(B^B-1)-n$

Other Numbers of Interest:

$$\left(\frac{\mathbf{x}}{\mathbf{x}-\mathbf{1}}\right)-\mathbf{x}^{\frac{1}{\mathbf{x}}}=\mathbf{1}$$

This formula may pertain to its single root as a number whose property allows it to be able to be used to predict the complexity of closed systems which sustain with maximum efficiency, or the order of multiplicity which things can be measured most effectively. Moreover the value of the roots of this function may provide a view into the maximum complexity of an arrangement of things whereat the most complicated sample of possible things, such as another curvature shape or equation, is required to be used to fully explain the concept of such a thing. The value has not fully been calculated here, but the number this formula is rooted at, is so far 1.72… or so.

Another number of interest is equal to:

$$\boldsymbol{I} = \mathbf{134279985}$$

Because it is equal to an ideal and comfortable expansion of the values between two and three, the first two integer numbers to alter each other in a series of multiplication that are not identical, in consecutive iteration towards an increasing increase in value by mathematical operation:

$$2*3+2^{3+1}+3^{2+1}+((3+1)^{2+2}*(2+1)^{3+2})+(2*3+2)^{(3*2+3)}\ldots$$

$$\ldots = I = \mathbf{134279985}.$$

I can be corresponded in its construction to a series expression with incrementing base values:

$$\sum_{\mathbf{n=0}}^{\infty}\frac{\mathbf{n}}{(\mathbf{n}+\mathbf{1})*(\mathbf{n}+\mathbf{2})+((\mathbf{n}+\mathbf{1})^{(\mathbf{n}+\mathbf{3})}+(\mathbf{n}+\mathbf{2})^{(\mathbf{n}+\mathbf{2})})+((\mathbf{n}+\mathbf{2})^{(\mathbf{n}+\mathbf{4})}*(\mathbf{n}+\mathbf{3})^{(\mathbf{n}+\mathbf{3})})+\left((\mathbf{n}+\mathbf{1})*(\mathbf{n}+\mathbf{2})+\mathbf{2}\right)^{\left((\mathbf{n}+\mathbf{1})*(\mathbf{n}+\mathbf{2})+\mathbf{3}\right)}}$$

This value product of the previous series, with its inverse defined as L, L is = $\mathbf{134279984.768}$.

And let K =134279984.884.. and is equal to the inverse of…

$$\sum_{n=1}^{\infty} \frac{1}{(n+1)*(n+2)+((n+1)^{(n+3)}+(n+2)^{(n+2)})+((n+2)^{(n+4)}*(n+3)^{(n+3)})+\left((n+1)*(n+2)+2\right)^{((n+1)*(n+2)+3)}}$$

While:

$$\frac{I-L}{I-K}=2$$

Astoundingly you can see that this number has a plethora of incredible properties.

So, you can say that number I and L and K share some astounding trends to do with their construction and the nature of their relevant expressions which terms itself in a way that is similar to how algebraic statements will begin to approximate towards true equality in numerous formulas as their extends towards infinity. An example is how the sum of inverses of a number to n power becomes closer to the inverse of that number minus one. Potentially this number I can be used to replace true infinity in certain calculation series in applied mathematics and etc. Note: 134964355 is the true value of I if you follow the rules in my previous text on time and space.

References: *No references or sources on these numbers or the information on this paper were found, perused, or used, and the work done and the theory involved was developed wholly by the author using their own background of knowledge and calculative methods.*

Formulations and Expressions of Two Geometrical Point Connection Complexity Graph Series Sequences

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Description: *The number sequence to enumerate the possibilites of the numeric index of number of vertices in connection in a series of unique graphs, by possible combinations as well as possible combinations with respect to geometric disorganization or hierarchy, shall now be listed following the governing functions.*

f(x)=2^(sum(i=1->index,i-1))

g(x)=(index)^(sum(i=1->index,i-1))

Software outputs enumerating this sequence:

the number to enumerate the sequence to: 15

index: 1

point pair permutation single connection: 1

index with all possible intersections considered: 1

index: 2

point pair permutation single connection: 2

index with all possible intersections considered: 2

index: 3

point pair permutation single connection: 8

index with all possible intersections considered: 27

index: 4

point pair permutation single connection: 64

index with all possible intersections considered: 4096

index: 5

point pair permutation single connection: 1024

index with all possible intersections considered: 9765625

index: 6

point pair permutation single connection: 32768

index with all possible intersections considered: 4.7018e+11

index: 7

point pair permutation single connection: 2097152

index with all possible intersections considered: 5.5855e+17

index: 8

point pair permutation single connection: 268435456

index with all possible intersections considered: 1.9343e+25

index: 9

point pair permutation single connection: 6.8719e+10

index with all possible intersections considered: 2.2528e+34

index: 10

point pair permutation single connection: 3.5184e+13

index with all possible intersections considered: 1.0000e+45

index: 11

point pair permutation single connection: 3.6029e+16

index with all possible intersections considered: 1.8906e+57

index: 12

point pair permutation single connection: 7.3787e+19

index with all possible intersections considered: 1.6825e+71

index: 13

point pair permutation single connection: 3.0223e+23

index with all possible intersections considered: 7.7194e+86

index: 14

point pair permutation single connection: 2.4759e+27

index with all possible intersections considered: 1.9845e+104

index: 15

point pair permutation single connection: 4.0565e+31

index with all possible intersections considered: 3.0873e+12

Analysis of the Number of Unique Numbers Generated

by Any of Two Identical Number Sets {0-X} Compounded in

Any of the Six Major Mathematical Operations

(powers, roots, multiplication, division, addition, and

subtraction) as Counting Sequences

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ABSTRACT: This paper discusses how the analysis of the number of unique (counted one for all number identities with identical cosequentials) numbers as a result of the combination of any two numbers up to index can be found to follow divergently asymmetrical sequences in terms of the complexity of the operation to increase or decrease in value of the numbers.

FINDINGS:

The article expresses, in order: the sequences, from most complex decreasing operation to most complex increasing operation. This article now discloses the first 64 values of the sequences:

-Roots sequence:

1, 3, 5, 9, 13, 21, 30, 42, 54, 65, 81, 101, 120, 144, 168, 195, 215, 247, 277, 313, 348, 387, 426, 470, 512, 548, 594, 636, 686, 742, 794, 854, 906, 968, 1030, 1097, 1143, 1215, 1284, 1358, 1430, 1510, 1585, 1669, 1750, 1835, 1920, 2012, 2099, 2171, 2262, 2360, 2456, 2560, 2658, 2765, 2869, 2979, 3087, 3203, 3312, 3432, 3548, 3670…

-Quotient sequence:

1, 3, 5, 9, 13, 21, 25, 37, 45, 57, 65, 85, 93, 117, 129, 145, 161, 193, 205, 241, 257, 281, 301, 345, 361, 401, 425, 461, 485, 541, 557, 617, 649, 689, 721, 769, 793, 865, 901, 949, 981, 1061, 1085, 1169, 1209, 1257, 1301, 1393, 1425, 1509, 1549, 1613, 1661, 1765, 1801, 1881, 1929, 2001, 2057, 2173, 2205, 2325, 2385, 2457…

-Difference sequence:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127…

-Addend sequence:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127…

-Product sequence:

1, 2, 4, 7, 10, 15, 19, 26, 31, 37, 43, 54, 60, 73, 81, 90, 98, 115, 124, 143, 153, 165, 177, 200, 210, 226, 240, 255, 268, 297, 309, 340, 355, 373, 391, 411, 424, 461, 481, 502, 518, 559, 576, 619, 639, 660, 684, 731, 748, 779, 801, 828, 851, 904, 926, 957, 979, 1009, 1039, 1098, 1117, 1178, 1210, 1238…

-Powers sequence:

1, 2, 4, 8, 12, 20, 29, 41, 51, 61, 77, 97, 116, 140, 164, 190, 208, 240, 271, 307, 341, 379, 418, 462, 504, 540, 586, 622, 671, 727, 780, 840, 882, 942, 1004, 1068, 1114, 1186, 1255, 1327, 1398, 1478, 1554, 1638, 1718, 1800, 1885, 1977, 2064, 2136, 2226, 2322, 2417, 2521, 2620, 2724, 2827, 2935, 3043, 3159, 3268, 3388, 3504, 3624…

These are clearly interesting and expansive sequences. It may be of significance that the addition and subtraction sequences are the same and expressed or somehow satisfied by three simple functions, one of which is $Y=|2x+1|$. It may also be of interest that multiplication and powers sequences diverge at the fourth unit and do not reconverge. Stranger yet, the roots and division sequences are seen to diverge at their seventh values. Two of these, the addition and subtraction sequences are linear, and the others are not of a standard and simply derived curvature.

Analysis of the Sequence of Minimum but Ideal Number of Axioms Generated By Geometric Systems of N Complexity

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ABSTRACT: This paper details the list of axioms, along with their total number of axioms in sequence, that will always apply and be relevant to geometrical systems of N complexity, or N number of points. It relies on the following:

a) *the points are not always organized regularly or are in any given position*

b) *the points* may be congruent or in the same reference but are not identical.

FINDINGS:

The findings of the sequence to date are as follows:

System Complexity	System Axioms	Value of Index
0		**0**
1	-Point equals itself -Point does not equal what is not that point -Point may form a regular solid within n-1 dimensions.	**3**
2	-Point equals itself -Point does not equal what is not that point -Point forms a regular solid	**5**

	within n-1 dimensions. -Points may be compared -Points may be connected	
3	-Point equals itself -Point does not equal what is not that point -Point forms a regular solid within n-1 dimensions. -Points may be compared -Points may be compared relatively to another -Points may be connected cyclically -Points may exist between or within solids in n-2 dimensions -Point connections may be intersected	**8**
4	-Point equals itself -Point does not equal what is not that point -Point forms a regular solid within n-1 dimensions. -Points may be compared -Points may be compared relatively to another -Points may be connected cyclically -Points may exist between or within solids in n-2 dimensions -Point connections may be intersected -Point comparisons may be	**9**

	compared to unconnected comparisons	
5	-Point equals itself -Point does not equal what is not that point -Point forms a regular solid within n-1 dimensions. -Points may be compared -Points may be compared relatively to another -Points may be connected cyclically -Points may exist between or within solids in n-2 dimensions -Point connections may intersect -Point comparisons may be compared to unconnected comparisons -Point comparison chains may be compared relatively to each other.	**10**
6	-Point equals itself -Point does not equal what is not that point -Point forms a regular solid within n-1 dimensions. -Points may be compared -Points may be compared relatively to another -Points may be connected cyclically -Points may exist between or within solids in n-2 dimensions	**11**

	-Point connections may intersect -Point comparisons may be compared to unconnected comparisons -Point comparison chains may be compared relatively to each other. -Point comparison chains may be compared to each other.	

CONCLUSION:

The findings of the sequence to date are as follows:

The most reasonable number of encompassing statements in a randomly assigned geometric system for n complexity is 0-6 is 0,3,5,8,9,10,11 for that number of points in a geometric system.

Theoretical Equation Parameters for Graphing or Predicting a reality tensor:

Eski (***http://eski.info/***)

3 levels to each step of the tensor graphing process (see 'postulate of time, space and numbers' for the format of space and time in this theory),

P – the structural evaluation or evolution

E- the energetic enumeration and direction

D- the determination of direction

Certain streams of energy which could be used to analyze live real data can be rendered to analog mathematical process within a computer to predict the future and the generalized interaction of matter. These three steps may be adequate or similar to such a method, for example:

$$P = \sum_{n=0}^{k} \frac{isn\hat{} - 1(\frac{isn(d_n) + isn(t)}{2})}{k}$$

$$E = I * \sum_{n=0}^{k} \frac{isn(\theta_n) * \frac{1}{d_n}}{k}$$

$$D = \sum_{n=0}^{k} \frac{isn\hat{} - 1(\frac{isn(\theta_n) * E}{I * P})}{k}$$

d_n *is equal to the distance between the point and point* n.
t *is eqal to time.*
$I = 134964355$ *or a 'finite infinity'*

θ_n *is equal then, to the normalized angle between two perpendicular planes of measurement, relative and parallel for the points measures across, whereat the two angles* $+/- PI$ *are averaged together ideally.*

I suggest I = 134964356 +/- 1 may be useful in determining the number of parts in an analog resonant computer circuit which naturally evaluates these particular expressions.

I believe that this analog computer technology, being able to measure reality directly using this logic, may be used in conjunction with user-specified commands to predict and know things which should be known about reality and life. I believe that it would be beneficial to even our questions revolving around spiritual matters, so that the computer can predict and determine what should be done with and because of, and how in regards to evil and good. Simultaneously it can be used to answer many questions and solve problems by helping coordinate and direct other life. Such a circuit would be basically conscious but with more restrictions; meanwhile with streamlined computational ability. It could even use itself as a timing and reference device, and likely self-refers to these exact formulas.

This requires 134964356 +/- 1 or some other finite value of summation steps to be the adequate and most accurate computation of applied geometrical 'infinite series,' as it could only be logically condensed in this fashion if my postulates (see my Collective mathematical works as a whole) are applicable in physical space. If this is to work, then infinite series to do with isn^-1(x) and potentially (at least for one case with exaction on the numerical harmony of this particular number of summations with isn^-1(x)) isn(x) should likely be carried only to the value 134964356 +/- 1. This would produce a feedback mechanism where determinism and considerable accuracy about real life events and dynamic memory of numbers continues throughout time uniquely as if they are material and alive. Theoretically, then, they are indeed alive and talking to us through this equation set.