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Title: MIRACLE EQUATION-CAN BE USED TO SOLVE 3 VARIABLES IN A SINGLE EQUATION

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Abstract : Before 2015, you required 3 equations to solve 3 variables. Now it isn't necessary. Seems impossible,but here is the proof.

PROOF:

MIRACLE EQUATION-CAN BE USED TO SOLVE 3 VARIABLES IN A SINGLE EQUATION.

MIRACLE EQUATION:

$$[(NX)^2 - \{(N-2)X^2] = [N-(1-X^2)]^2 - [N-(1+X^2)]^2 = 4(N-1)X^2$$

The above three way related algebraic formulae or equation or Algebraic Identity which is true for all real values of N and X , is actually analogous to the equation $[A^2-B^2]=C^2-D^2= E$ where A = NX ,B = (N—2) X , C = [N—(1—X²)], D=[N—(1+X²)] & E= 4(N—1)X² where .A,B.C,D & E are five variables. One way of analyzing the same is, if anyone chooses one of these five variables either A,B,C,D or E, the remaining 4 variables can be found out , by applying suitable values (by trial and error)to N and X , in the considered variable and the other variables turn out correspondingly to the same. Viewed alternatively,

$A^2—B^2 = C^2—D^2$.Suppose one chooses C=1174.In my convention $C = [N—(1—X^2)]$, I arbitrarily,choose X=15,therefore N=950,therefore D=724 , A=14250 and B=14220.B, D and A could be found without calculators and that is mysterious. Even E can be found out.The second case or application is given below. Now ,there is an interesting application wherein ,we can utilize this equation to solve 3 unknown variables in a single equation. Assuming the 3 variabled equation is of the form ax + by + dz = k where a ,b ,d are coefficients and x , y , z are variables and k is the constant . Solution is given by $x = A^2/a$, $y = B^2/(-b)$ and $z= D^2/d$, since equaton is of the form $A^2—B^2+D^2 = C^2$ Hence the solution to the equation 2x + 3y + 4z = 16 Here C = 4 . Arbitrarily selected values of N = 1 , X = 2 to satisfy

$C=[N—(1—X^2)]$ Ergo , x = 2, y = - 4/3 and z = 4. Alternatively. let us substitute X as any rational number .X can assume infinite values.(Albeit, if X is real ie for instance the irrational number case, we need not get exact solutions and might therefore get only approx. solutions). We could generate different values of $N = C + 1 - X^2$,corresponding to X equal any rational number.We can threreby get infinite solutions to this equation,since the three variables are related to N and X only.We could resort to algorithm and programming at this stage,since a general equation is involved. Please note that

$C = \sqrt{k}$ PN: When k is a perfect square , calculations are simple. Otherwise,multiply k by itself.For the equation to remain unchanged multiply each term of LHS by k and then resort to the steps like below Suppose one need to solve $2x+3y+4z=13$ Taking the necessary steps,the equation becomes ie multiplying each term in the given equation by k = 13,it transforms into $26x+39y+52z= 169$,therefore $x= A^2/a$,$y= B^2/(-b)$ and $z= D^2/d$ HERE C= 13, If selected value of X=2, $N = k+1 - X^2=13+1- 4=10$ Therefore $x= 400/26=200/13$, $y=256/-39= -256/39$ and $z= 25/52$ Take another value of X = 15,then $N= k+1 - X^2= 13+1-225= -211$. $A= NX= -3165$ $B= (N—2) X= -3195$ $D=[N—(1+X^2)] = -437$ $x= A^2/a= 385277.8846$ $y= B^2/(-b)= -261744.2308$ and $z= D^2/d = 3672.480769$ Verification $26x+39y+52z= 169$ $26(385277.8846)-39(261744.2308)+52(3672.480769)=169$ (hence We can obtain infinite solutions to(x,y, z) for rational or real number solutions,but they need not be exact solutions,for set of irrational numbers. Suppose the equation is of the form $lx +my + nz = k$ where if $l = a$ then $x= A^2/a$,if otherwise $l = -a$ then $x= A^2/(-a)$ and if $m = b$ then $y= B^2/(-b)$.otherwise if $m=-b$ then $y= B^2/(b)$ and finally if $n=+d$ then $z= D^2/d$,otherwise if $n=-d$ then $z= D^2/(-d)$.Hence x,y and z can attain all sets of values pertaining to real numbers excepting 0 and few trivial solutions Hence,using a supercomputer or quantumn computer a billion solutions can be obtained in a few minutes.

Conclusion

The modified form of miracle equation is akin to special relativity equations brought to the standard form

(E =) $Y^2 = A^2 - B^2 = C^2 - D^2$ **, the altered time dilation equation**

$(t')^2 = (t)^2 - (tv/c)^2$ is in that form , hence if we are aware of merely the fixed value (t'). the remaining two variables are determinate ie t and tv/c, implies t and v could also be found out. I mean the numerical values they attain (these variables)ie the general solution can be determined.