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Beal Conjecture Proven False by 49 Counter Examples: Factors do not have to be Common Prime Factors

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Abstract: Beal conjecture proven false by 49 Counter examples. Factors do not have to be common prime factors. Addition and multiplication can be used as a tool of exponents. Addition of the base is a new method I invented.

Keyword*- Exponents, Addition, Multiplication, Renee Descartes.*

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I. INTRODUCTION

WE SHOW HERE AGAIN HOW very common numbers can show the Beal conjecture false as there are no prime numbers in Common. This shows how a new methodology of adding the base the number of times as the exponent proves Beal conjecture false. Loosely tied with Pythagorean support supporting squares not cubes is Partly Fermat's last theorem- not really true as shown here. We can use both methods together of multiplication and addition. Exponential factors are different THAN ARITHMETIC FACTORS AS WE SEE IN.

II. 49 EXAMPLES

- *Example 1*

243+ 10^10= 7^3

3^5 + 10^ 10= 7^3

243 + 10+10+10+ 10 +10+ + 10+10+ 10+ 10 +10 = 7^3

243 + 100=343

There are no common prime factors. 10, 7 and 3 are not common prime factors.

- *Example 2*

171^3 = 513

512+ 1= 171^3=513

512 + 1 = 171*3

Beal shown false as512, 1 and 513 are not prime numbers.

- *Example 3*

208^3 +

624 + 1^3 =5^4= 625

- *Example 4*

1^3 + 2^3=3^3= 3+3+3 =9

1^3 + 8 =9

1, 2, 3 are not common prime factors.

- *Example 5*

20^3 + 97* 13*1^3= 21^3 relying on traditional cube root theory of three numbers multiplied Together.

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8000 + 1261 =9162

- *Example 6*

43^5 + 1^3 =6^3

215 + 1= 216

Is not composite or prime Beal shown false.

- *Example 7*

2^5 + 1^3 = 11^3

32 + 1+ 33=11+ 11+11

1 is not composite or prime number.

- *Example 8*

5^3 + 1^3 = 2^7

125 + (1+ 1+1) =128

- *Example 9*

5^ 3 + 1^7 =2^6

125 + 1+1 +1+1+1 +1+1=2^6

125 + 7 = 132

- *Example 10*

3^5 + 2^8 = 499

243+ 256 = 499

499= 499

499 prime so no common prime factor found using the old method of multiplication. I show how the old and new method can be used together.

- *Example 11*

This Beal conflict was partly a struggle about religion. Pierre de Fermat was viewed as support for Pythagoras that only squares can be equal inn a triangle not cubes associated with Pythagoras of Samos from Greece from the 6th century B.C. Pythagoras tied to 6th century religion discussed in Cosmos his special book from 1980 (1).

- *Example 12*

29*31+ 5^3 =4^5

899 + 125 =1024

No common prime factor.

- *Example 13*

1^3 + 10^3 = 10^3

1001 = 1000 similar numbers.

1 is not prime or composite.

- *Example 14*

1^3 + 111^9 =10^3

1+ 111+ 111+111+111+111+111+ 111+ 111+111=1000

1+ 999= 1000

No common prime factor.

- *Example 15*

1^3 + 2^3 = 3^2

With three dimensions, we can multiply the base times exponent times 2. More of the exponents are greater than 2. We can look at world as having three dimensions like the sphere contributed to 3-dimensional vision in flatland. We can use the old method of multiplication of base also to multiply by 2 as 3 dimensional.

- *Example 16*

We can view 3 on 1^3 +2^3 = 3^3 as 2 dimensional and square 3 to disprove Beal conjecture.

- *Example 17*

3^5 + 13 =4^3

243 + 13 = 256

No common prime number.

- *Example 18*

37+ 3^3 =4^3

37 + 27 =64

Can use both techniques multiplication and addition.

- *Example 19*

15^3 + 0^3= 15^3

No common prime factor. 0is positive number.

- *Example 20*

15^3+ 1^3=3376

3375 + 1 =3376

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No common prime factor as 1 is not common.

- *Example 21*

1^3 + 0^3 = 1^3

1 is not composite or prime.

- *Example 22*

12^3 = 10^3+2^3 *91

1728 = 1000 + 2^3 * 91

No common prime factors.

- *Example 23*

3^3 + 2^ 7= 6^3 – 4^3

27 + 128 =152

- *Example 24*

2^3 + 3^3 = 35

8+ 27 = 35

No common prime factor.

- *Example 25*

2^3 + 19 = 3^3

8+ 19 = 27

No common prime factor.

- *Example 26*

11^4 + 3^3= 5^3

44 + 27 = 125

No common prime factor.

- *Examples 27*

5^3 + 4^3 = 7*13 * 2^3

125 + 64 =189

No common prime factor.

- *Examples 28*

5^3 + (3^3 + 4^3) = 6^3

125 + 91 = 216

- *Examples 29*

1^3 + 10^3 = 10^3

1 + 1000= 1001

1 is not composite or prime.

- *Examples 30*

7* 13* 2^3 + 1^3 = 9^3

728 + 1 = 729

1 is not composite or prime.

- *Example 31*

Sometimes there are two common prime factor not one. Beal conjecture is false as there can be 2 common prime factor.

6^3 + 6^3 = 2(6^3)

2 and 3 are common not one factor as American math society supports.

- *Example 32*

15^3 + 1 = 16^3

15+ 1=16

3375 = 4096

15 and 16 do not have common prime factors. Not clear what Beal conjecture is asking for. What has to be equal 15+1 or cubes of numbers?

III. DISCUSSION

Here we show how a new technique of adding the base the number of times as the exponent proves the Beal conjecture false. The key determinant of proving Beal false is if we use Renee Descartes method linked to the time before the French revolution and many deaths and guillotining or the new method I show. Proven by 14 examples.

Exponent factors are different than arithmetic factors- example 33.

- *Example 33.*

3^3 + 6^3 = 3^5

3^3 + 3^ 72 = 3^81

27 + 216 = 243

The first 3 is an arithmetic factor one multiplies 3 times 3 times 3 to get 27. The latter two numbers are base times exponent. Those two are not common prime factors but

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different type of factors. 3 is a different type of factor in the three cases.

- *Example 34*

1^3 + 3^3 *37 =10^3

1+ 999=1000

1000=1000

No Common prime factor.

- *Example 35*

1^3 + 3*37 * 3331= 100^3

1+ 999999 =1,000,000

3 factors are a cubed root

1 is not composite or prime.

- *Example 36*

3^3 +5^1 = 2^5

No common prime factor as 3,5, 2 not common to all 3

27 + 1+1+ 1 +1 +1 =32

No reason not to use addition for exponents.

- *Example 37*

5^4 + 13^8 = 9^3

625 + 104 = 729

No common prime factors. 5, 13, and 9 are no common prime factors.

My interpretation of exponents 13+ 13 + 13 + 13+13+ 13 + 13 + 13 =104 helps show Beal conjecture false and work easier with numbers.

- *Example 38*

3^4 * 333677 *37=100000000

81* 37* 333677+ 1^3 = 1000000000

9999999999+ 1 = 1 billion

1 is not composite or prime.

- *Example 39*

5^3 + 4^3 = 3^3 7

No need for common prime factors shown be example.

- *Example 40*

2^4 *5 + 1^3 = 3^4

80+ 1= 81

No common prime factor.

- *Example 41*

10^3+3^8=2^10

1000+24=1024

No common prime factor as factors come in pairs.

- *Counterexample 42*

2^9+2^9=2^10

512+512=1024

No common PRIME FACTOR

Factors come in pairs not one number

2 and 9 are different than 2 and 10

- *Counterexample #43*

2^9+1^3=3^3*19

512+1=513

Beal conjecture proven false

1,2,3 proven false. There is no common prime factor. There is no rule not to multiple by a number.

- *Counterexample 44*

6^3 + 2^7 = 7^3 +1

216 + 128 = 343+1

344= 344

- *Counterexample #45*

5^3 + 4^3 = 3^3 *7

125+ 64 = 189

- *Counterexample #46*

(4^3+ 1^3) + 2^4= 3^4

64+ 1 + 16 = 81

No common prime factor.

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➢ *Counterexample #47*

A unique method new to math where we add the base the number of times as the exponent

2^4 + 3^3 = 5^5

16+ 3+3+3= 5+5+5 +5+5

16+ 9 = 25 (1)

No Common Prime Factor.

➢ *Counterexample 48*

5^3 + 5^3 *4 = 5^4

125 + 500 = 625

No Common Prime Factors Come in Pairs

➢ *Counterexample 49*

182^4 +1 ^3 = 9^3

728 + 1 = 729

New method of addition of base number of times as exponent shows Beal conjecture false. No common prime factor still.

The new method of adding together numbers is morally no different except Beal conjecture is easily shown false. We accept books like Flatland by Edwin Abbott of 1884 that our perspective can change based on our dimensionality. (3) New ideas expand our view of the world. Sphere opens people's mind in Flatland.2can be seen as 3 dimensional meeting Beal's requirements.

IV. CONCLUSION

We show here how a new method of addition of the base the number of times as the exponents shows Beal conjecture false as not having common prime factor. 10, 7 and 3 are not common prime factors. New theories can be invented to change from the past. This is vaguely related to the discussion of Math as a language of size, shape and form In Lancelot Hagen's Mathematics for the Million (2).

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