



A NEW PROXIMITY PARADOX TO DISPROVE BEAL CONJECTURE

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INTRODUCTION

Zeno introduced a series of paradoxes in Greek history involving math. A New paradox can be introduced involving greater than.

“Zeno's paradoxes Zeno's paradoxes are a set of philosophical problems devised by the Eleatic Greek philosopher Zeno of Elea (c. 490–430 BC).” Greater than can be seen to include the number as we try to find greater than 2, 2 is included as we have to always approach nearer and nearer to 2 to be complete in analysis. We would not be evaluating all values near and greater than 2, so we have to include 2 to evaluate all values of the conjecture. When Beal Conjecture includes 2, the conjecture is false.

Discussion

$$12^2 + 5^2 = 13^2$$

the numbers are not common prime factors.

144+ 25 does equal 169. There are also no common prime factors involved, so the conjecture is false.

Beal conjecture can be seen as false with the paradox that greater than 2 includes 2 as we have to always get closer and closer to 2 and include 2. An infinitely small proximity paradox is illustrated. Close and proximate to 2 have to include 2 to evaluate the conjecture. At 2 the conjecture is false. Infinitely close to 2 is nonexistent or too small to see and includes 2.

Conclusion

I show Beal conjecture false using a new proximity paradox. To study close to and greater than 2, I must include 2 as we have to stay close and include 2. Close to 2 includes infinitely small spaces and hence no space or include 2. At 2 the conjecture is shown false. Common prime factors are not needed for Beal type of equations when an exponent can have a value of 2. Some phrasings of the Beal conjecture do include 2. Beal conjecture is false as common prime factors are not needed with the exponent 2 very close to 2.

REFERENCES

1. “Zeno’s paradox” discussion on Wikipedia.org accessed 4/28/2023.
