# THE CONTINUITY OF PRIME NUMBERS <br> CAN LEAD TO EVEN CONTINUITY (GOLDBACH CONJECTURE) 

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## Abstract

$n$ continuous prime numbers can combine a group of continuous even numbers. If an
adjacent prime number is followed, the even number will continue. For example, if we take prime number 3 , we can get even number 6 . If we follow an adjacent prime number 5, we can get even numbers by using 3 and 5: 6, 8 and 10. If a group of continuous prime numbers $3,5,7,11, \ldots, P$, we can get a group of continuous even numbers $6,8,10,12, \ldots, 2 n$. Then if an adjacent prime number q is followed, the original group of even numbers $6,8,10,12, \ldots, 2 n$ will be finitely extended to $2(n+1)$ or more adjacent even numbers. My purpose is to prove that the continuity of prime numbers will lead to even continuity as long as $2(n+1)$ can be extended. If the continuity of even numbers is discontinuous, it violates the Bertrand Chebyshev theorem of prime numbers.

Because there are infinitely many prime numbers: $3,5,7,11, \ldots$
We can get infinitely many continuous even numbers: $6,8,10,12, \ldots$.

Keywords and phrases: prime even continuity, Bertrand Chebyshev theorem, ascending and descending, extreme law, mathematical complete induction.

