

# A proof of the Goldbach conjecture

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If an even  $E$  enjoys the  $G$  property to be decomposable as the sum of just two primes, then all its multiple  $k$  enjoy the same property, if the so called weak form of the conjecture is true, as it has been recently shown: namely every odd is the sum of three primes.

In fact, the consequence of the weak conjecture is that it is possible to decompose  $(k+1)E$  in at most four primes: thus, for the said  $E$  enjoying  $G$ ,  $kE$  can be decomposed into two primes.

But both 8 and twice each prime enjoy  $G$ , and every even greater than 5 can be expressed as a multiple of either 8 or twice a prime.

Thus every even greater than 5 enjoy the  $G$  property, then proving the conjecture.