



## Proof Of Twin Prime Conjecture

Paras Gupta

---

### ABSTRACT

*Twin Prime numbers are prime numbers which differ by two. Twin Prime conjecture states that there are infinite number of Twin primes. This paper presents the proof of twin prime conjecture in an easy and understandable way.*

### KEYWORDS

*prime, composite*

*Received 20 September, 2021; Revised: 03 October, 2021; Accepted 05 October, 2021 © The author(s) 2021. Published with open access at [www.questjournals.org](http://www.questjournals.org)*

### I. INTRODUCTION

Twin Prime conjecture is also known as Polignac's conjecture. Twin Prime is conjecture is one of the most popular unsolved problems in mathematics. This paper presents the proof of twin prime conjecture in an easy and uncomplicated way.

### PROOF

There are two types of print numbers. One that falls in the series 1,7,13, 19,25,31,37,43,49,....

Other that falls in the series 5,11,17,23,29,35,41,47,....

There are infinite prime numbers in both series.

Corresponding to every number in the first series, there is a number differing by two in the second series. Examples are 11,13;17,19;23,25.

Either both of these numbers are prime, or one is prime and other is composite, or both are composite. There are infinite pair of numbers that lie in all the possibilities. There are infinite pair of numbers which lie in the first possibility which states that both are prime. There is no prove that there are finite pair of numbers in the first possibility. Hence there are infinite number of Twin primes

### REFERENCE

Wikipedia

