FORMULA FOR TWIN PRIMES

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Theory of Numbers

"Wherever there is a number is the beauty"

[Proclo]

Abstract

The present article shows an unpublished formula to evaluate twin primes, the formula is based on the theorem of Wilson and contains mathematical functions like greatest common divisor, factorial and floor function.

Keywords: Number, Mathematics, Arithmetic, Mathematical, Formula Mathematical, Twin Primes, Primes Numbers, Theory of Numbers, Theorem of Wilson.

FORMULA TO KNOW IF A PRIME NUMBER HAS A TWIN PRIME

For **p** prime, if floor (gcd (((p+1)! + 1)/ (p+2), 2)) is equal to 1, the p+2 is prime too:

$$a(p) = (p + 2) * \left\lfloor GCD\left(\frac{(p + 1)! + 1}{p + 2}, 2\right) \right\rfloor$$