

Hello World!

Jeevman Banggore

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# 1 HDTN:Introduction

As I am a monster, I will use the prior PRIME finder documentation in order to optimize the brute force search for the divisors of HDTN. When god speaks to us he does so gently, like a nurse to a sick child.

A highly divisible triangle number is the sum of consecutive natural numbers, starting from one.

The only prime HDTN is three as the sum of one, and two.

Hence all HDTNs greater than 3 have more than one factor.

The divisors of the HDTN are able to be classified into two root domain types, even and odd.

However factors can either be odd or even.

The need for classification for odd or even, comes from the implied root where  $a*b = c$ .

If even,  $\frac{a}{2} * b = c$ , if odd,  $\frac{a}{3} * b = c$ .

This can be imagined as a ladder.

Where the gaps in the ladder are null space, consisting of three classification types.

Odd, even, odds-that-are-prime.

The factors of a HDTN of either root domain classification can be one of these three types.

Then assuming base factor set yielded from  $(\frac{a}{2} * b = c) \vee (\frac{a}{3} * b = c)$