Beautiful Natural Numbers (BNNs)

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Abstract:
I give definition of Beautiful Natural Numbers (BNNs) and relate it to the theorem I claimed earlier on distinct proper fractions that sum to 1.

Introduction:
A second reading of an earlier paper revealed that the set of natural numbers $(1,2,3,6)$ has the interesting arithmetic properties that lead me to propose the uniqueness of the triple fractions $(\frac{1}{2},\frac{1}{3},\frac{1}{6})$.

Discussion:
The interesting arithmetic properties of the triple of the natural number $(1,2,3)$ are

(i)Their sum product:

$$1+2+3=6 \qquad\qquad \textbf{(1)}$$

(ii)Their Multiplication product:

$$1\times 2\times 3=6 \qquad\qquad \textbf{(2)}$$

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[2] https://cran.r-project.org/web/classifications/MSC.html
  http://www.ams.org/msc/msc2010.html

(1)

Equations (1) and (2) simply say "the sum product of the of the natural numbers $(1,2,3)$ *equals* their multiplication product"

$$1+2+3 = 1\times 2\times 3 \qquad\qquad \textbf{(3)}$$

The equality in equation (3) leads to theorem of the sum of fractions $(\frac{1}{2},\frac{1}{3},\frac{1}{6})$ being equals to 1.

Proof:
Dividing both sides of equation (3) by $1\times 2\times 3 = 6$ and rearrange we get

$$\frac{1}{2}+\frac{1}{3}+\frac{1}{6}=1 \qquad\qquad \textbf{(4)}$$

Definition:
Any set of three natural numbers are said to be beautiful natural numbers (BNNs) if they satisfy the relation

$$x+y+z = x\times y\times z \qquad\qquad \textbf{(5)}$$

so that

$$\frac{1}{y\times z}+\frac{1}{x\times z}+\frac{1}{x\times y}=1 \qquad\qquad \textbf{(6)}$$

is satisfied.

Conclusion:
A set of three natural numbers are said to be beautiful when their sum products equals their multiplication product. The only beautiful triple of natural numbers is $1,2,3$.

Reference:
viXra:1902.0200 [pdf] *submitted on 2019-02-11 06:24:07*
A Theorem on Sum of Triple of Distinct Proper Fractions
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