## The Larson Number System

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Because we need only positive integers or reciprocals of positive integers, when representing spins in the Reciprocal System of Theory, and we must make use of what is available, which is the usual positive and negative integers including zero, then here is a method of conversion.

Write: Absolute value of a number $r$ to be $\operatorname{ABS}(\mathrm{r})=|\mathrm{r}|$ and define $|0|=1$.

$$
\begin{equation*}
K=e^{B \cdot \ln (C)}=C^{B} \text { where } B=\frac{r}{|r|} \text { and } C=n \cdot|r| \tag{1}
\end{equation*}
$$

Where $\mathrm{n}=1,2,3, \ldots$ (the positive integers)
Where r may be:

- $1,2,3, \ldots$ (the positive integers)
- $-1,-2,-3, \ldots$ (the negative integers)
- 0. 

This will mean that:

- for positive values of $\mathrm{r}, \mathrm{B}=1$ and $\mathrm{K}=\mathrm{C}$
- for negative values of $r, B=-1$ and $K=1 / C$
- for a zero value of $\mathrm{r}, \mathrm{B}=0$ and $\mathrm{K}=1$

| $\mathbf{r}$ | $\mathbf{- 3}$ | $\mathbf{- 2}$ | $\mathbf{- 1}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | $\frac{1}{3 n}$ | $\frac{1}{2 n}$ | $\frac{1}{n}$ | 1 | n | 2 n | 3 n |

In other words, for every integer $r$ (positive, negative or zero) in the real numbers there is a corresponding number K in the Larson number system, which is either a positive integer or its reciprocal.

