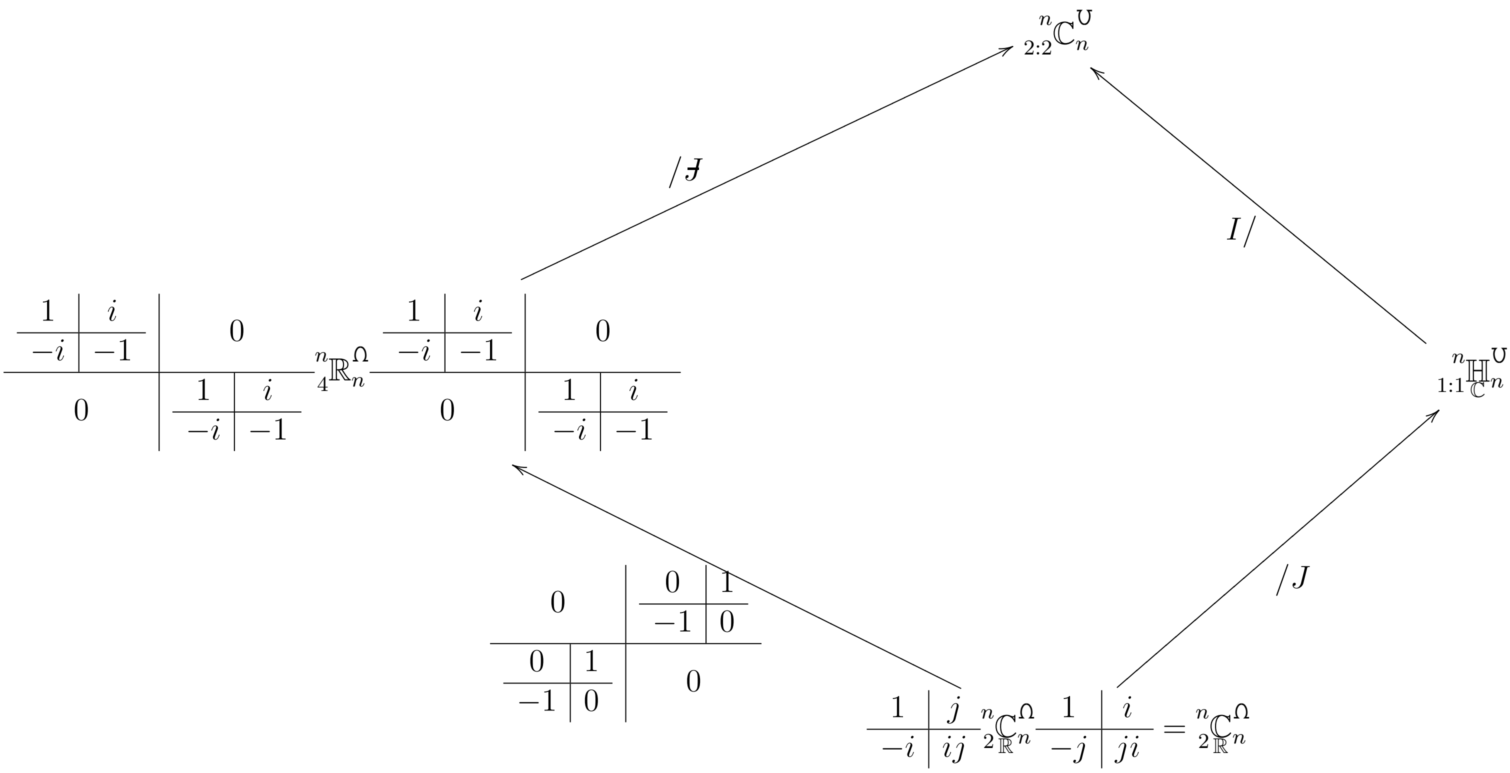

$$ {}^{n}_{2}\mathbb{R}^{\subset}_{n} \ni \begin{array}{c|c} a & b \\ \hline c & d \end{array} $$

$$ {}^{n}_{\times}\mathbb{R}^{\subset}_{n} \ni \begin{array}{c|c} a & 0 \\ \hline 0 & d \end{array} $$

$$ \begin{array}{c|c} a & b \\ \hline c & d \end{array} = \text{Ɨ} \begin{array}{c|c} a & b \\ \hline c & d \end{array} \text{Ɨ} = \begin{array}{c|c} a & -b \\ \hline -c & d \end{array} \Leftrightarrow \begin{cases} b = 0 \\ c = 0 \end{cases} $$

$$ {}^{n}_{\mathbb{R}}\mathbb{C}^{\subset}_{n} \ni \begin{array}{c|c} a & b \\ \hline -b & a \end{array} $$

$$ \begin{array}{c|c} a & b \\ \hline c & d \end{array} = \text{Ɉ} \begin{array}{c|c} a & b \\ \hline c & d \end{array} \text{Ɉ}^{-1} = \begin{array}{c|c} d & -c \\ \hline -b & a \end{array} \Leftrightarrow \begin{cases} a = d \\ b = -c \end{cases} $$

$$ {}^{n}_{=}\mathbb{R}^{\subset}_{n} \ni \begin{array}{c|c} a & 0 \\ \hline 0 & a \end{array} $$

$$ \begin{array}{c|c} a & 0 \\ \hline 0 & d \end{array} = J \begin{array}{c|c} a & 0 \\ \hline 0 & d \end{array} J = \begin{array}{c|c} d & 0 \\ \hline 0 & a \end{array} \Leftrightarrow a = d $$

$$\begin{array}{c|c} a & b \\ \hline -b & a \end{array} = J \begin{array}{c|c} a & b \\ \hline -b & a \end{array} J = \begin{array}{c|c} a & -b \\ \hline b & a \end{array} \Leftrightarrow b = 0$$

$$Jz = -zJ \Leftrightarrow z = \begin{array}{c|c} a & b \\ \hline -b & -a \end{array}$$

$$\begin{array}{c|c} a & 0 \\ \hline 0 & -a \end{array} \in {}^{n}\mathbb{R}_{n}^{\mathbb{C}} \longrightarrow \frac{{}^{n}_{\mathbb{R}}\mathbb{C}_{n}^{\mathsf{C}}}{{}^{n}_{=}\mathbb{R}_{n}^{\mathsf{C}}}$$

$${}^{n}_{2}\mathbb{R}_{n}^{\mathbb{C}} \longrightarrow {}^{n}_{2}\mathbb{R}_{n}^{\mathsf{C}} \ni \overbrace{J - z}^{-1} \underbrace{J + z}$$

$$\begin{array}{c|c} 0 & b \\ \hline -b & 0 \end{array} \in {}^{n}\mathbb{R}_{n}^{\mathbb{C}} \longrightarrow \frac{{}^{n}_{\times}\mathbb{R}_{n}^{\mathsf{C}}}{{}^{n}_{=}\mathbb{R}_{n}^{\mathsf{C}}}$$