

$${}^x\mathfrak{t} = \frac{{}^x\mathfrak{s}}{{}^x\mathfrak{c}}$$

$${}^{-x}\mathfrak{t} = -{}^x\mathfrak{t}$$

$$-\frac{\pi}{2} \Big| \frac{\pi}{2} \xrightarrow{\text{bij}} \mathbb{R}$$

$${}^x\mathfrak{t} = \frac{{}^x\mathfrak{s}{}^x\mathfrak{c} - {}^x\mathfrak{s}{}^x\mathfrak{c}}{{}^x\mathfrak{c}^2} = \frac{{}^x\mathfrak{c}^2 + {}^x\mathfrak{s}^2}{{}^x\mathfrak{c}^2} = \frac{1}{{}^x\mathfrak{c}^2} > 0 \Rightarrow \mathfrak{t} \text{ streng isoton}$$

$$x \rightsquigarrow \frac{\pi}{2} \Rightarrow \begin{cases} {}^x\mathfrak{s} \rightsquigarrow 1 \\ {}^x\mathfrak{c} \rightsquigarrow 0 \end{cases} \Rightarrow {}^x\mathfrak{t} \rightsquigarrow +\infty$$

$$x \rightsquigarrow -\frac{\pi}{2} \Rightarrow -x \rightsquigarrow \frac{\pi}{2} \Rightarrow {}^x\mathfrak{t} = -{}^{-x}\mathfrak{t} \rightsquigarrow -(+\infty) = -\infty$$