Bunch \this \text{ is defined by the construction and induction axioms}
\begin{align*}
2, 2\times\this & : \this \\
2, 2\times B : B & \Rightarrow \this : B
\end{align*}

Bunch \that \text{ is defined by the construction and induction axioms}
\begin{align*}
2, \that \times \that & : \that \\
2, B \times B : B & \Rightarrow \that : B
\end{align*}

Prove \this = \that .

\ §

Recursive construction for \this \text{ produces}
\this_n = 2^{(0..n) + 1}

So we guess \this_n = 2^{\text{nat} + 1} \text{ and find that it satisfies both construction and induction for } \this . \text{ Hence } \this = 2^{\text{nat} + 1} .

Recursive construction for \that \text{ produces}
\that_n = 2^{(0..\Delta) + 1} \text{ where } \Delta = 2^n \text{ but I can't do 4 levels typographically.}

We don't have number axioms to say that $2^{\infty} = \infty$, but anyway I guess \that_n = 2^{\text{nat} + 1} \text{ and find that it satisfies both construction and induction for } \that . \text{ Hence } \that = 2^{\text{nat} + 1} .

Therefore \this = \that .