t1_binarith (TMRPPqhQnxdr82dar2Wed2S7Vcopz14irF5)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.((v3\_card\_1\ X2\ X0) \wedge (m2\_finseq\_1\ X2\ X1)) \Rightarrow (k4\_finseq\_1\ X2 = k2\_finseq\_1\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.(m2\_finseq\_1\ X2\ X1) \Rightarrow (\forall X3.(m2\_finseq\_1\ X3\ X1) \Rightarrow ((X0 \in k4\_finseq\_1\ X2) \Rightarrow (k7\_partfun1\ X1\ (k8\_finseq\_1\ X1\ X2\ X3)\ X0 = k7\_partfun1\ X1\ X2\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow (m2\_finseq\_1\ (k12\_finseq\_1\ X0\ X1)\ X0) \tag{3}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ X2) \Rightarrow (\forall X4.((v3\_card\_1\ X4\ X1) \wedge (m2\_finseq\_1\ X4\ X2)) \Rightarrow ((X0 \in k2\_finseq\_1\ X1) \Rightarrow (k7\_partfun1\ X2\ (k8\_finseq\_1\ X2\ X4\ (k12\_finseq\_1\ X2\ X3))\ X0 = k7\_partfun1\ X2\ X4\ X0))))))$$