t12_radix_5 (TMWg-MueE1g9UTywgwU8dDzbipX2y4K8jX1Z)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ 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 $k3\_radix\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_radix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_radix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_numbers : \iota$ be given. Let $k6\_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.((v3\_card\_1\ X2\ X0) \wedge (m2\_finseq\_1\ X2\ X1)) \Rightarrow (\forall X3.((v3\_card\_1\ X3\ X0) \wedge (m2\_finseq\_1\ X3\ X1)) \Rightarrow ((\forall X4.(v7\_ordinal1\ X4) \Rightarrow ((X4 \in k2\_finseq\_1\ X0) \Rightarrow (k1\_funct\_1\ X2\ X4 = k1\_funct\_1\ X3\ X4))) \Rightarrow (X2 = X3))))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((\neg v1\_xboole\_0\ (k3\_radix\_1\ X0)) \wedge (m1\_subset\_1\ (k3\_radix\_1\ X0)\ (k1\_zfmisc\_1\ k4\_numbers))) \tag{2}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (\forall X3.((v3\_card\_1\ X3\ X2) \wedge (m2\_finseq\_1\ X3\ (k3\_radix\_1\ X1))) \Rightarrow (((X0 \in k2\_finseq\_1\ X2) \Rightarrow (k4\_radix\_1\ X0\ X1\ X2\ X3 = k1\_funct\_1\ X3\ X0)) \wedge ((X0 = k6\_numbers) \Rightarrow (k4\_radix\_1\ X0\ X1\ X2\ X3 = k6\_numbers)))))) \tag{3}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((r1\_xxreal\_0\ np\_\_1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.((v3\_card\_1\ X2\ X0) \wedge (m2\_finseq\_1\ X2\ (k3\_radix\_1\ X1))) \Rightarrow (\forall X3.((v3\_card\_1\ X3\ X0) \wedge (m2\_finseq\_1\ X3\ (k3\_radix\_1\ X1))) \Rightarrow ((\forall X4.(v7\_ordinal1\ X4) \Rightarrow ((X4 \in k2\_finseq\_1\ X0) \Rightarrow (k4\_radix\_1\ X4\ X1\ X0\ X2 = k4\_radix\_1\ X4\ X1\ X0\ X3))) \Rightarrow (k8\_radix\_1\ X0\ X1\ X2 = k8\_radix\_1\ X0\ X1\ X3))))))$$