t52_chain_1 (TMWyQC1UxrqGJNfneoJK13dJUtwsgnbgBpF)

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Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_chain\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_chain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_chain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_chain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k1\_euclid : \iota \Rightarrow \iota$ be given. Let $v1\_abian : \iota \Rightarrow o$ be given. Let $k5\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_chain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers)) \Rightarrow (\forall X1.(m1\_chain\_1\ X1\ X0) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers) \Rightarrow (k5\_chain\_1\ X0\ X1\ X2 = k1\_xboole\_0))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers)) \Rightarrow (\forall X1.(m1\_chain\_1\ X1\ X0) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k4\_chain\_1\ X0\ X1\ (k2\_nat\_1\ X2\ np\_\_1)))) \Rightarrow (k10\_chain\_1\ X0\ X1\ X2\ X3 = ReplSep\ (toset\ (\lambda X4 : \iota.m2\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k1\_euclid\ X0))\ (k4\_chain\_1\ X0\ X1\ X2))))\ (\lambda X4 : \iota.(r1\_xxreal\_0\ (k2\_nat\_1\ X2\ np\_\_1)\ X0) \wedge (\neg v1\_abian\ (k5\_card\_1\ (k9\_subset\_1\ (k4\_chain\_1\ X0\ X1\ (k2\_nat\_1\ X2\ np\_\_1))\ (k9\_chain\_1\ X0\ X1\ X2\ X4)\ X3))))\ (\lambda X4 : \iota.X4))))) \tag{5}$$

Theorem 1

$$\forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers))\Rightarrow(\forall X2.(m1\_chain\_1\ X2\ X1)\Rightarrow((\neg r1\_xxreal\_0\ (k2\_nat\_1\ X0\ np\_\_1)\ X1)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k4\_chain\_1\ X1\ X2\ (k2\_nat\_1\ X0\ np\_\_1))))\Rightarrow(k10\_chain\_1\ X1\ X2\ X0\ X3 = k5\_chain\_1\ X1\ X2\ X0)))))$$