t28_revrot_1 (TMSX-pTvcWeTwV9x6my4mWAYUywVCgH2n1e9)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_goboard2 : \iota \Rightarrow \iota$ be given. Let $k1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k2\_goboard1 : \iota \Rightarrow \iota$ be given. Let $k1\_goboard1 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k1\_goboard2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.((v1\_finseq\_6\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge (m2\_finseq\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (k28\_seq\_4\ (k2\_goboard1\ X1) = k28\_seq\_4\ (k2\_goboard1\ (k1\_finseq\_6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X1\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.((v1\_finseq\_6\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge (m2\_finseq\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (k28\_seq\_4\ (k1\_goboard1\ X1) = k28\_seq\_4\ (k1\_goboard1\ (k1\_finseq\_6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X1\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0) \wedge (((\neg v1\_xboole\_0\ X1) \wedge (m1\_finseq\_1\ X1\ X0)) \wedge (m1\_subset\_1\ X2\ X0))) \Rightarrow (\neg v1\_xboole\_0\ (k1\_finseq\_6\ X0\ X1\ X2)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge((m1\_finseq\_1\ X1\ X0)\wedge(m1\_subset\_1\ X2\ X0)))\Rightarrow(m2\_finseq\_1\ (k1\_finseq\_6\ X0\ X1\ X2)\ X0) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow(k2\_goboard2\ X0 = k1\_goboard2\ (k28\_seq\_4\ (k1\_goboard1\ X0))\ (k28\_seq\_4\ (k2\_goboard1\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge(v5\_relat\_1\ X1\ X0))\Rightarrow((v1\_xboole\_0\ X1)\wedge((v1\_relat\_1\ X1)\wedge(v5\_relat\_1\ X1\ X0)))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow(v5\_relat\_1\ X1\ X0) \tag{9}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_finseq\_6\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\wedge(m2\_finseq\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))))\Rightarrow(k2\_goboard2\ (k1\_finseq\_6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X1\ X0) = k2\_goboard2\ X1))$$