t42_rewrite2 (TMW2uEuXnPPNx5TL5rxc4k4yXBJhv6kVSa8)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_afinsq\_1 : \iota \Rightarrow \iota$ be given. Let $r3\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_partit\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.r2\_relset\_1\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0)\ (k7\_rewrite2\ X0\ (k1\_partit\_2\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0)))\ (k1\_partit\_2\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_rewrite1\ k1\_xboole\_0\ X0\ X1) \Rightarrow (X0 = X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow ((r2\_relset\_1\ X0\ X1\ X2\ X3) \Leftrightarrow (X2 = X3)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0)))) \Rightarrow (m1\_subset\_1\ (k7\_rewrite2\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1\ (k1\_partit\_2\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k8\_afinsq\_1\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k8\_afinsq\_1\ X0))\Rightarrow((r3\_rewrite2\ X0\ X1\ X2\ X3)\Leftrightarrow(r1\_rewrite1\ (k7\_rewrite2\ X0\ X1)\ X2\ X3)))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k1\_partit\_2\ X0\ X1 = k1\_xboole\_0 \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k8\_afinsq\_1\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k8\_afinsq\_1\ X0))\Rightarrow((r3\_rewrite2\ X0\ (k1\_partit\_2\ (k8\_afinsq\_1\ X0)\ (k8\_afinsq\_1\ X0))\ X1\ X2)\Rightarrow(X1 = X2)))$$