t42_mcart_1 (TMVBz-zrBAbVP7YN6VdQCogJSbEskGj2pSCc)

October 27, 2020

Let $k3\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(k2\_zfmisc\_1\ (k2\_xboole\_0\ X0\ X1)\ X2 = k2\_xboole\_0\ (k2\_zfmisc\_1\ X0\ X2)\ (k2\_zfmisc\_1\ X1\ X2)) \wedge (k2\_zfmisc\_1\ X2\ (k2\_xboole\_0\ X0\ X1) = k2\_xboole\_0\ (k2\_zfmisc\_1\ X2\ X0)\ (k2\_zfmisc\_1\ X2\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1\ X0\ X1\ X2\ X3 = k2\_enumset1\ X0\ X2\ X1\ X3 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1\ X0\ X1\ X2\ X3 = k2\_xboole\_0\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\ \forall X6.\forall X7.k6\_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6\ X7 = k2\_xboole\_0\ (k2\_enumset1\ X0\ X1\ X2\ X3)\ (k2\_enumset1\ X4\ X5\ X6\ X7) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2\_zfmisc\_1\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3) = k2\_enumset1\ (k4\_tarski\ X0\ X2)\ (k4\_tarski\ X0\ X3)\ (k4\_tarski\ X1\ X2)\ (k4\_tarski\ X1\ X3) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3\_xtuple\_0\ X0\ X1\ X2 = k4\_tarski\ (k4\_tarski\ X0\ X1)\ X2 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3\_zfmisc\_1\ X0\ X1\ X2 = k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)\ X2 \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\ k3\_zfmisc\_1\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3)\ (k2\_tarski\ X4\ X5) = k6\_enumset1\ (k3\_xtuple\_0\ X0\ X2\ X4)\ (k3\_xtuple\_0\ X0\ X3\ X4)\ (k3\_xtuple\_0\ X0\ X2\ X5)\ (k3\_xtuple\_0\ X0\ X3\ X5)\ (k3\_xtuple\_0\ X1\ X2\ X4)\ (k3\_xtuple\_0\ X1\ X3\ X4)\ (k3\_xtuple\_0\ X1\ X2\ X5)\ (k3\_xtuple\_0\ X1\ X3\ X5)$$