t14_weierstr (TMP1ghErAqzkTw8aJiva3dmoheKePyzYRFt)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_topmetr : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v2\_compts\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_weierstr : \iota \Rightarrow \iota$ be given. Let $k7\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k1\_weierstr : \iota \Rightarrow \iota$ be given. Let $k5\_seq\_4 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2))) \Rightarrow (m1\_subset\_1\ X0\ X2) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\neg(X2 \neq k1\_xboole\_0) \wedge ((v2\_compts\_1\ X2\ X0) \wedge ((v5\_pre\_topc\ X1\ X0\ k3\_topmetr) \wedge (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (\neg(X3 \in X2) \wedge ((X4 \in X2) \wedge ((k3\_funct\_2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X3 = k4\_seq\_4\ (k1\_weierstr\ (k7\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X2))) \wedge (k3\_funct\_2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X4 = k5\_seq\_4\ (k1\_weierstr\ (k7\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X2)))))))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (m1\_subset\_1\ (k7\_relset\_1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ k3\_topmetr)))\Rightarrow (k2\_weierstr\ X0 = k4\_seq\_4\ (k1\_weierstr\ X0)) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(\neg(X2\neq k1\_xboole\_0)\wedge((v2\_compts\_1\ X2\ X0)\wedge((v5\_pre\_topc\ X1\ X0\ k3\_topmetr)\wedge(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\neg(X3\in X2)\wedge(k3\_funct\_2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X3 = k2\_weierstr\ (k7\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X2)))))))))$$