t57_toprealc (TMd-jnHP3R2DMap1QrEEi4QYmrWfzmtXncu4)

October 27, 2020

Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17\_toprealc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $k3\_topmetr : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ 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 $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr)))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k5\_numbers) \Rightarrow (((X2 \in k2\_finseq\_1\ X0) \wedge (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ X0))) \Rightarrow (k3\_funct\_2\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr)\ X1\ X3 = k7\_partfun1\ k1\_numbers\ X3\ X2))) \Rightarrow (v5\_pre\_topc\ X1\ (k15\_euclid\ X0)\ k3\_topmetr)))) \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0) \wedge (v7\_ordinal1\ X1)) \Rightarrow ((v1\_funct\_1\ (k17\_toprealc\ X0\ X1)) \wedge ((v1\_funct\_2\ (k17\_toprealc\ X0\ X1)\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr)) \wedge (m1\_subset\_1\ (k17\_toprealc\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr))))) \tag{4}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr))))))\Rightarrow((X2 = k17\_toprealc\ X0\ X1)\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ X0)))\Rightarrow(k3\_funct\_2\ (u1\_struct\_0\ (k15\_euclid\ X0))\ (u1\_struct\_0\ k3\_topmetr)\ X2\ X3 = k7\_partfun1\ k1\_numbers\ X3\ X1)))))) \tag{5}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Leftrightarrow(X0 \in k4\_ordinal1) \tag{6}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow((X0 \in k2\_finseq\_1\ X1)\Rightarrow(v5\_pre\_topc\ (k17\_toprealc\ X1\ X0)\ (k15\_euclid\ X1)\ k3\_topmetr)))$$