t38_topreal1 (TMJDzSaiQqYgUb33t957bgnWTYUnnvcydwf)

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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 $k7\_topreal1 : \iota \Rightarrow \iota$ be given. Let $k5\_topreal1 : \iota \Rightarrow \iota$ be given. Let $k4\_topreal1 : \iota \Rightarrow \iota$ be given. Let $k6\_topreal1 : \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k18\_euclid : \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k17\_euclid : \iota \Rightarrow \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (r1\_xxreal\_0\ X0\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k7\_topreal1\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k6\_topreal1\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k5\_topreal1\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k4\_topreal1\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (m1\_subset\_1\ (k18\_euclid\ X0)\ k1\_numbers) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (m1\_subset\_1\ (k17\_euclid\ X0)\ k1\_numbers) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k7\_topreal1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow((X2 \in X1)\Leftrightarrow((r1\_xxreal\_0\ (k17\_euclid\ X2)\ (k17\_euclid\ X0))\wedge(k18\_euclid\ X2 = k18\_euclid\ X0)))))) \tag{8}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k6\_topreal1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow((X2 \in X1)\Leftrightarrow((k17\_euclid\ X2 = k17\_euclid\ X0)\wedge(r1\_xxreal\_0\ (k18\_euclid\ X2)\ (k18\_euclid\ X0))))))) \tag{9}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k5\_topreal1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow((X2 \in X1)\Leftrightarrow((r1\_xxreal\_0\ (k17\_euclid\ X0)\ (k17\_euclid\ X2))\wedge(k18\_euclid\ X2 = k18\_euclid\ X0)))))) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k4\_topreal1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow((X2 \in X1)\Leftrightarrow((k17\_euclid\ X2 = k17\_euclid\ X0)\wedge(r1\_xxreal\_0\ (k18\_euclid\ X0)\ (k18\_euclid\ X2))))))) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \tag{12}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{13}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow ((X0 \in k7\_topreal1\ X0)\wedge((X0 \in k5\_topreal1\ X0)\wedge((X0 \in k4\_topreal1\ X0)\wedge(X0 \in k6\_topreal1\ X0))))$$