t46_topreal9 (TMUk1eLbuWChD3QKPsVgUi6nHKSDJuuvQc1)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_jgraph\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_jgraph\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ 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 $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12\_euclid : \iota \Rightarrow \iota$ be given. Let $k5\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ 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.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow ((X3 \in k7\_jgraph\_6\ X0\ X1\ X2) \Leftrightarrow (r1\_xxreal\_0\ (k12\_euclid\ (k5\_algstr\_0\ (k15\_euclid\ np\_\_2)\ X3\ (k19\_euclid\ X0\ X1)))\ X2))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow ((X3 \in k5\_jgraph\_6\ X0\ X1\ X2) \Leftrightarrow (k12\_euclid\ (k5\_algstr\_0\ (k15\_euclid\ np\_\_2)\ X3\ (k19\_euclid\ X0\ X1)) = X2))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (r1\_xxreal\_0\ X0\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_xreal\_0\ X0) \wedge ((v1\_xreal\_0\ X1) \wedge (v1\_xreal\_0\ X2))) \Rightarrow (m1\_subset\_1\ (k5\_jgraph\_6\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \tag{7}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\forall X2. (v1\_xreal\_0\ X2)\Rightarrow(r1\_tarski\ (k5\_jgraph\_6\ X0\ X1\ X2)\ (k7\_jgraph\_6 X0\ X1\ X2))))$$