t9_xxreal_2 (TMdeE5UMhHBqd7TYbAfVuhJZ1CrgonU7dxa)

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Let $v2\_membered : \iota \Rightarrow o$ be given. Let $k2\_xxreal\_2 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_xxreal\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (\forall X1.(v2\_membered\ X1) \Rightarrow (\forall X2.\ (m2\_xxreal\_2\ X2\ X0) \Rightarrow (\forall X3.(m2\_xxreal\_2\ X3\ X1) \Rightarrow (m2\_xxreal\_2\ (k3\_xxreal\_0\ X2\ X3)\ (k2\_xboole\_0\ X0\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ (k2\_xboole\_0\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (\forall X1.(v2\_membered\ X1) \Rightarrow ((r1\_tarski\ X0\ X1) \Rightarrow (\forall X2.(m2\_xxreal\_2\ X2\ X1) \Rightarrow (m2\_xxreal\_2\ X2\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1)) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xxreal\_0\ X2) \Rightarrow (((r1\_xxreal\_0\ X0\ X1) \wedge (r1\_xxreal\_0\ X0\ X2)) \Rightarrow (r1\_xxreal\_0\ X0\ (k3\_xxreal\_0\ X1\ X2))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v2\_membered\ X0) \wedge (v2\_membered\ X1)) \Rightarrow (\ v2\_membered\ (k2\_xboole\_0\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(\forall X1.(m2\_xxreal\_2\ X1\ X0)\Rightarrow (v1\_xxreal\_0\ X1)) \tag{7}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(v1\_xxreal\_0\ (k2\_xxreal\_2\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(\forall X1.(v1\_xxreal\_0\ X1)\Rightarrow((X1 = k2\_xxreal\_2\ X0)\Leftrightarrow((m2\_xxreal\_2\ X1\ X0)\wedge(\forall X2.(m2\_xxreal\_2 X2\ X0)\Rightarrow(r1\_xxreal\_0\ X2\ X1))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{10}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 X0))\Rightarrow(v2\_membered\ X1)) \tag{11}$$

Theorem 1

$$\forall X0.(v2\_membered\ X0)\Rightarrow(\forall X1.(v2\_membered\ X1)\Rightarrow(k2\_xxreal\_2 (k2\_xboole\_0\ X0\ X1) = k3\_xxreal\_0\ (k2\_xxreal\_2\ X0)\ (k2\_xxreal\_2 X1)))$$