t16_measure6 (TMZ73PbPKcrEc3JTUkMsDTQyAmuihknWX1E)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v6\_xxreal\_2 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_measure5 : \iota \Rightarrow o$ be given. Let $k1\_measure5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_supinf\_2 : \iota \Rightarrow \iota$ be given. Let $k8\_supinf\_2 : \iota \Rightarrow \iota$ be given. Let $v2\_membered : \iota \Rightarrow o$ be given. Let $v1\_xxreal\_2 : \iota \Rightarrow o$ be given. Let $v2\_xxreal\_2 : \iota \Rightarrow o$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xxreal\_2 : \iota \Rightarrow \iota$ be given. Let $k1\_xxreal\_2 : \iota \Rightarrow \iota$ be given. Let $k7\_numbers : \iota$ be given. Assume the following.

$$\forall X0.((v2\_membered\ X0) \wedge ((\neg v1\_xxreal\_2\ X0) \wedge ((\neg v2\_xxreal\_2\ X0) \wedge (v6\_xxreal\_2\ X0)))) \Rightarrow (\exists X1.(v1\_xxreal\_0\ X1) \wedge (\exists X2.(v1\_xxreal\_0\ X2) \wedge ((r1\_xxreal\_0\ X1\ X2) \wedge (X0 = k4\_xxreal\_1\ X1\ X2)))) \tag{1}$$

Assume the following.

$$\forall X0.((v2\_membered\ X0) \wedge ((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xxreal\_2\ X0) \wedge ((\neg v2\_xxreal\_2\ X0) \wedge (v6\_xxreal\_2\ X0))))) \Rightarrow (X0 = k4\_xxreal\_1\ (k2\_xxreal\_2\ X0)\ (k1\_xxreal\_2\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (k8\_supinf\_2\ X0 = k1\_xxreal\_2\ X0) \tag{3}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (k7\_supinf\_2\ X0 = k2\_xxreal\_2\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k7\_numbers) \wedge (m1\_subset\_1\ X1\ k7\_numbers)) \Rightarrow (k1\_measure5\ X0\ X1 = k4\_xxreal\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (v2\_membered\ (k4\_xxreal\_1\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow((\neg v1\_xxreal\_2\ (k4\_xxreal\_1\ X0\ X1))\wedge(\neg v2\_xxreal\_2\ (k4\_xxreal\_1\ X0\ X1))) \tag{7}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(m1\_subset\_1\ (k8\_supinf\_2\ X0)\ k7\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(m1\_subset\_1\ (k7\_supinf\_2\ X0)\ k7\_numbers) \tag{9}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))\Rightarrow((v1\_measure5\ X0)\Leftrightarrow(\exists X1.(m1\_subset\_1\ X1\ k7\_numbers)\wedge(\exists X2.(m1\_subset\_1\ X2\ k7\_numbers)\wedge(X0 = k1\_measure5\ X1\ X2)))) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k7\_numbers)\Rightarrow(v1\_xxreal\_0\ X0) \tag{11}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v6\_xxreal\_2\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow((v1\_measure5\ X0)\Rightarrow(X0 = k1\_measure5\ (k7\_supinf\_2\ X0)\ (k8\_supinf\_2\ X0)))$$