

t6_extreal2 (TMTJAdYUPiW- bLr8bNjVX1udcx27SbrU1yNE)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $k3_extreal1 : \iota \Rightarrow \iota$ be given. Let $k2_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_3 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_0 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_supinf_2 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k1_xxreal_3 X0 (k2_xxreal_3 X0) = k6_numbers) \quad (1)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow (\neg(X0 \neq k6_numbers) \wedge (r1_xxreal_0 (k3_extreal1 X0) k6_numbers)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (r1_xxreal_0 X1 (k1_xxreal_3 X1 X0)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$k2_xcmplx_0 np_1 (k4_xcmplx_0 np_1) = np_0 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow (k2_supinf_2 X0 = k2_xxreal_3 X0) \quad (7)$$

Assume the following.

$$k1_supinf_2 = k1_xboole_0 \quad (8)$$

Assume the following.

$$k2_xcmplx_0 \text{ np_1 } (k4_xcmplx_0 \text{ np_1 }) = k6_numbers \quad (9)$$

Assume the following.

$$\neg v1_xboole_0 \text{ k7_numbers} \quad (10)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Leftrightarrow (X0 \in k7_numbers) \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 \text{ k7_numbers}) \Rightarrow & (((r1_xxreal_0 \text{ k6_numbers} \\ X0) \Rightarrow (k3_extreal1 X0 = X0)) \wedge & ((\neg r1_xxreal_0 \text{ k6_numbers} X0) \Rightarrow (k3_extreal1 \\ X0 = k2_supinf_2 X0))) \end{aligned} \quad (12)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 \text{ k7_numbers}) \Rightarrow (\neg(k3_extreal1 X0 = k2_supinf_2 X0) \wedge ((X0 \neq k6_numbers) \wedge (r1_xxreal_0 \text{ k6_numbers} X0)))$$