

t74_rinfsup1

(TMb7Bayytej2BtQA2WmXYfaC2C5WEfY9rki)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v8_valued_0 : \iota \Rightarrow o$ be given. Let $v2_seq_2 : \iota \Rightarrow o$ be given. Let $k1_rinfsup1 : \iota \Rightarrow \iota$ be given. Let $k3_rinfsup1 : \iota \Rightarrow \iota$ be given. Let $k2_rinfsup1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_seq_2 : \iota \Rightarrow o$ be given. Let $k4_rinfsup1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v7_valued_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers k1_numbers) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow (((\\ & v8_valued_0 X1) \wedge (v2_seq_2 X1)) \Rightarrow ((k1_seq_1 (k3_rinfsup1 X1) X0 = \\ & k2_rinfsup1 X1) \wedge (v3_funct_1 (k3_rinfsup1 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & ((v1_seq_2 X0) \Rightarrow (k1_seq_1 (k4_rinfsup1 X0) k6_numbers = k1_rinfsup1 \\ & X0)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & ((v2_seq_2 X0) \Rightarrow (k1_seq_1 (k3_rinfsup1 X0) k6_numbers = k2_rinfsup1 \\ & X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & (((v7_valued_0 X0) \Rightarrow (v2_seq_2 X0)) \wedge ((v8_valued_0 X0) \Rightarrow (v1_seq_2 \\ & X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers k1_numbers) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow ((v8_valued_0 \\ & X1) \Rightarrow (k1_seq_1 (k4_rinf sup1 X1) X0 = k1_seq_1 X1 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$m2_subset_1 k6_numbers k1_numbers k5_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & ((v1_funct_1 (k3_rinf sup1 X0)) \wedge ((v1_funct_2 (k3_rinf sup1 X0) \\ & k5_numbers k1_numbers) \wedge (m1_subset_1 (k3_rinf sup1 X0) (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers k1_numbers)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & k1_numbers))) \Rightarrow (((v1_funct_1 X0) \wedge (v3_funct_1 X0)) \Rightarrow ((v1_funct_1 \\ & X0) \wedge ((v7_valued_0 X0) \wedge (v8_valued_0 X0)))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & (((v8_valued_0 X0) \wedge (v2_seq_2 X0)) \Rightarrow (k1_rinf sup1 (k3_rinf sup1 \\ & X0) = k2_rinf sup1 X0)) \end{aligned}$$