

t12\_rinfsup1  
(TMUcFjqKgQXN8jnX1MbmW2vEAtyw3QQvYd6)

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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  $v2\_seq\_2 : \iota \Rightarrow o$  be given. Let  $v1\_seq\_2 : \iota \Rightarrow o$  be given. Let  $k32\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k1\_numbers) \wedge \\ (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \Rightarrow \\ ((v1\_seq\_2 X0) \Leftrightarrow (v2\_seq\_2 (k32\_valued\_1 k5\_numbers k1\_numbers \\ X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v3\_membered X1) \wedge ((v1\_funct\_1 \\ X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow (k32\_valued\_1 \\ X0 X1 X2 = k30\_valued\_1 X2) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v3\_membered X1) \wedge ((v1\_funct\_1 \\ X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow (k32\_valued\_1 \\ X0 X1 (k32\_valued\_1 X0 X1 X2) = X2) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (((\neg v1\_xboole\_0 X1) \wedge (v3\_membered \\ X1)) \wedge ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 \\ (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((v1\_funct\_1 (k30\_valued\_1 \\ X2)) \wedge (v1\_partfun1 (k30\_valued\_1 X2) X0)) \end{aligned} \tag{4}$$

Assume the following.

$$v3\_membered k1\_numbers \tag{5}$$

Assume the following.

$$\neg v1\_xboole\_0 \ k1\_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v3\_membered \ X1)\wedge((v1\_funct\_1 \\ & X2)\wedge(m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X0 \ X1))))))\Rightarrow((v1\_funct\_1 \\ & (k32\_valued\_1 \ X0 \ X1 \ X2))\wedge(m1\_subset\_1 \ (k32\_valued\_1 \ X0 \ X1 \ X2) \ ( \\ & k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ X0 \ k1\_numbers)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 \ X2 \ (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 \ X0 \ X1)))\Rightarrow((v1\_partfun1 \ X2 \ X0)\Rightarrow(v1\_funct\_2 \ X2 \ X0 \ X1)) \end{aligned} \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_funct\_1 \ X0)\wedge((v1\_funct\_2 \ X0 \ k5\_numbers \ k1\_numbers)\wedge \\ & (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (k2\_zfmisc\_1 \ k5\_numbers \ k1\_numbers))))))\Rightarrow \\ & ((v2\_seq\_2 \ X0)\Leftrightarrow(v1\_seq\_2 \ (k32\_valued\_1 \ k5\_numbers \ k1\_numbers \\ & X0))) \end{aligned}$$