

t31\_funct\_8  
(TMbzRa7BASEdRfFi9i9wR5vJk4Ptf4AFSPV)

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Let  $v1\_funct\_8 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_numbers : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r2\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k52\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k20\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k37\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k50\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k35\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $k18\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v3\_valued\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_8 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_numbers))) \Rightarrow \\ & (\forall X1.((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k1\_numbers k1\_numbers)))) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow ((r1\_funct\_8 \\ & X0 k1\_numbers k1\_numbers X1) \wedge (r2\_funct\_8 X0 k1\_numbers k1\_numbers \\ & X2)) \Rightarrow (r2\_funct\_8 X0 k1\_numbers k1\_numbers (k20\_valued\_1 k1\_numbers \\ & k1\_numbers k1\_numbers X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_8 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_numbers))) \Rightarrow \\ & (\forall X1.((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k1\_numbers k1\_numbers)))) \Rightarrow ((r1\_funct\_8 X0 k1\_numbers k1\_numbers \\ & X1) \Rightarrow (r1\_funct\_8 X0 k1\_numbers k1\_numbers (k37\_valued\_1 k1\_numbers \\ & k1\_numbers X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v3\_membered \\ & X1) \wedge ((v3\_membered X2) \wedge (((v1\_funct\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))) \wedge ((v1\_funct\_1 X4) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X2))))))) \Rightarrow (k52\_valued\_1 X0 X1 X2 X3 X4 = k50\_valued\_1 \\ & X3 X4) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3\_membered\ X1)\wedge((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\Rightarrow((k37\_valued\_1\ X0\ X1\ X2 = k35\_valued\_1\ X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v3\_membered\ X1)\wedge((v3\_membered\ X2)\wedge((v1\_funct\_1\ X3)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\wedge((v1\_funct\_1\ X4)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X2))))))\Rightarrow(k20\_valued\_1\ X0\ X1\ X2\ X3\ X4 = k18\_valued\_1\ X3\ X4) \quad (5)$$

Assume the following.

$$v3\_membered\ k1\_numbers \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3\_membered\ X1)\wedge((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\Rightarrow((v1\_funct\_1\ (k37\_valued\_1\ X0\ X1\ X2))\wedge(m1\_subset\_1\ (k37\_valued\_1\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \quad (7)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow((v1\_relat\_1\ (k35\_valued\_1\ X0))\wedge((v1\_funct\_1\ (k35\_valued\_1\ X0))\wedge(v1\_valued\_0\ (k35\_valued\_1\ X0)))) \quad (8)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0\ X1))))\Rightarrow(k50\_valued\_1\ X0\ X1 = k18\_valued\_1\ X0\ (k35\_valued\_1\ X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\wedge((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0\ X1))))\Rightarrow(k18\_valued\_1\ X0\ X1 = k18\_valued\_1\ X1\ X0) \quad (10)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v3\_valued\_0\ X0))\Rightarrow((v1\_relat\_1\ X0)\wedge(v1\_valued\_0\ X0)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v3\_valued\_0\ X2)) \quad (13)$$

**Theorem 1**

$$\begin{aligned} &\forall X0.((v1\_funct\_8\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k2\_numbers)))\Rightarrow \\ &(\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow(((r2\_funct\_8\ X0\ k1\_numbers\ k1\_numbers\ X1)\wedge(r1\_funct\_8\ X0\ k1\_numbers\ k1\_numbers\ X2))\Rightarrow(r2\_funct\_8\ X0\ k1\_numbers\ k1\_numbers\ (k52\_valued\_1\ k1\_numbers\ k1\_numbers\ k1\_numbers\ X1\ X2)))))) \end{aligned}$$