

t36\_funct\_8  
(TMJTC2GPSbdznyyBBxFzZYAMcJgFa7tuA6n)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v4\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k37\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k35\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v2\_funct\_8 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_8 : \iota \Rightarrow o$  be given. Let  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $v3\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3\_membered X1) \wedge ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow (k37\_valued\_1 X0 X1 X2 = k35\_valued\_1 X2) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge (v4\_relat\_1 X1 X0)) \Rightarrow (k1\_relset\_1 X0 X1 = k9\_xtuple\_0 X1) \quad (2)$$

Assume the following.

$$v3\_membered k1\_numbers \quad (3)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v2\_funct\_8 X0)) \Rightarrow (v1\_funct\_8 (k9\_xtuple\_0 X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3\_membered X1) \wedge ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((v1\_funct\_1 (k37\_valued\_1 X0 X1 X2)) \wedge (m1\_subset\_1 (k37\_valued\_1 X0 X1 X2) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k1\_numbers)))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ ((v1\_relat\_1 (k35\_valued\_1 X0)) \wedge ((v1\_funct\_1 (k35\_valued\_1 \\ X0)) \wedge (v1\_valued\_0 (k35\_valued\_1 X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ (\forall X1.((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_valued\_0 \\ X1)))) \Rightarrow ((X1 = k35\_valued\_1 X0) \Leftrightarrow ((k9\_xtuple\_0 X1 = k9\_xtuple\_0 X0) \wedge \\ (\forall X2.(X2 \in k9\_xtuple\_0 X1) \Rightarrow (k1\_funct\_1 X1 X2 = k5\_xcmplx\_0 \\ (k1\_funct\_1 X0 X2))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (\forall X2. \\ ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 \\ X1)))) \Rightarrow ((v3\_funct\_8 X2 X0 X1) \Leftrightarrow (\forall X3.(m1\_subset\_1 X3 k1\_numbers) \Rightarrow \\ (((X3 \in k1\_relset\_1 X0 X2) \wedge (k1\_real\_1 X3 \in k1\_relset\_1 X0 X2)) \Rightarrow ( \\ k1\_funct\_1 X2 (k1\_real\_1 X3) = k1\_funct\_1 X2 X3)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow ((v2\_funct\_8 X0) \Leftrightarrow (v1\_funct\_8 (k9\_xtuple\_0 \\ X0))) \quad (9)$$

Assume the following.

$$\forall X0.(v3\_membered X0) \Rightarrow (v1\_membered X0) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1\_membered X0) \wedge (v1\_membered X1)) \Rightarrow ( \\ \forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow \\ (((v1\_funct\_1 X2) \wedge (v4\_funct\_8 X2 X0 X1)) \Rightarrow ((v1\_funct\_1 X2) \wedge ( \\ v2\_funct\_8 X2) \wedge (v3\_funct\_8 X2 X0 X1)))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 X0 X1))) \Rightarrow ((v4\_relat\_1 X2 X0) \wedge (v5\_relat\_1 X2 X1)) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1\_membered X0) \wedge (v1\_membered X1)) \Rightarrow ( \\ \forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow \\ (((v1\_funct\_1 X2) \wedge (v2\_funct\_8 X2) \wedge (v3\_funct\_8 X2 X0 X1)) \Rightarrow ( \\ (v1\_funct\_1 X2) \wedge (v4\_funct\_8 X2 X0 X1)))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered X1)\Rightarrow(\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_valued\_0 X2)) \quad (15)$$

**Theorem 1**

$$\forall X0.((v1\_funct\_1 X0)\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers))))\Rightarrow((v4\_funct\_8 X0 k1\_numbers k1\_numbers)\Rightarrow(v4\_funct\_8 (k37\_valued\_1 k1\_numbers k1\_numbers X0) k1\_numbers k1\_numbers))$$