

l23_integra8

(TMQVh4Fe1n8GfFdvY1Rh1GiXDBN3yqmx9R)

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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 $k20_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k18_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & \quad k1_numbers k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (m1_subset_1 \\ & \quad X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (r2_relset_1 \\ & \quad k1_numbers k1_numbers (k20_valued_1 k1_numbers k1_numbers k1_numbers \\ & \quad (k32_valued_1 k1_numbers k1_numbers X0) (k32_valued_1 k1_numbers \\ & \quad k1_numbers X1)) (k20_valued_1 k1_numbers k1_numbers k1_numbers \\ & \quad X0 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 \\ & \quad (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 X0 X1)))) \Rightarrow ((r2_relset_1 X0 X1 X2 X3) \Leftrightarrow (X2 = X3)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v3_membered \\ & \quad X1) \wedge ((v3_membered X2) \wedge (((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 X0 X1)))) \wedge ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 X0 X2))))))) \Rightarrow (k20_valued_1 X0 X1 X2 X3 X4 = k18_valued_1 \\ & \quad X3 X4) \end{aligned} \tag{3}$$

Assume the following.

$$v3_membered k1_numbers \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v3_membered\ X1)\wedge((v1_funct_1 \\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow((v1_funct_1 \\ (k32_valued_1\ X0\ X1\ X2))\wedge(m1_subset_1\ (k32_valued_1\ X0\ X1\ X2)\ (\\ k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k1_numbers)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v3_membered \\ X1)\wedge((v3_membered\ X2)\wedge(((v1_funct_1\ X3)\wedge(m1_subset_1\ X3\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ X1)))))\wedge((v1_funct_1\ X4)\wedge(m1_subset_1\ X4\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ X2)))))))\Rightarrow((v1_funct_1\ (k20_valued_1\ X0\ X1\ X2 \\ X3\ X4))\wedge(m1_subset_1\ (k20_valued_1\ X0\ X1\ X2\ X3\ X4)\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ k1_numbers)))) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_funct_1\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k1_numbers\ k1_numbers))))\Rightarrow(\forall X1.((v1_funct_1\ X1)\wedge(m1_subset_1 \\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers))))\Rightarrow(k20_valued_1 \\ k1_numbers\ k1_numbers\ k1_numbers\ (k32_valued_1\ k1_numbers\ k1_numbers \\ X0)\ (k32_valued_1\ k1_numbers\ k1_numbers\ X1) = k20_valued_1\ k1_numbers \\ k1_numbers\ k1_numbers\ X0\ X1)) \end{aligned}$$