t3_fraenkel (TMVxTNj8NqUyjXi4vLwQaZniVVDVXTgB9YX)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.k5\_partfun1\ X0\ X1\ (k3\_partfun1\ k1\_xboole\_0\ X0\ X1) = k1\_funct\_2\ X0\ X1 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X2)))\Rightarrow(((r1\_tarski\ X0\ X1)\wedge(r1\_tarski\ X2\ X3))\Rightarrow(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ X3)))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(X0 = k1\_xboole\_0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 \in k1\_funct\_2\ X0\ X1)\Rightarrow((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1)\Rightarrow((v1\_xboole\_0\ X1)\vee(X0 \in X1)) \tag{5}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.\forall X2.\forall X3.((r1\_tarski\ X2\ X1)\wedge(r1\_tarski\ X3\ X0))\Rightarrow((k1\_funct\_2\ X2\ X3 = k1\_xboole\_0)\vee(\forall X4.(m1\_subset\_1\ X4\ (k1\_funct\_2\ X2\ X3))\Rightarrow((v1\_funct\_1\ X4)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ X0))))))))$$