t25_prob_4 (TMXC-nbo95wQEfQQx9vQhGKY5nPw6A8MSsJD)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $m2\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_prob\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_measure3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_prob\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_numbers : \iota$ be given. Let $v10\_valued\_0 : \iota \Rightarrow o$ be given. Let $v6\_supinf\_2 : \iota \Rightarrow o$ be given. Let $v4\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v2\_valued\_0 : \iota \Rightarrow o$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v3\_valued\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.(m2\_prob\_1\ X2\ X0\ X1) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)) \Rightarrow ((m1\_prob\_4\ X3\ X0\ X1\ X2) \Leftrightarrow (m1\_measure3\ X3\ X0\ X1\ (k2\_prob\_4\ X0\ X1\ X2))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X1\ k7\_numbers) \wedge ((v10\_valued\_0\ X2) \wedge ((v6\_supinf\_2\ X2) \wedge ((v4\_measure1\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))) \Rightarrow (\forall X3.\forall X4.((X3 \in X1) \wedge (X4 \in X1)) \Rightarrow (\forall X5.(m1\_measure3\ X5\ X0\ X1\ X2) \Rightarrow (\forall X6.(m1\_measure3\ X6\ X0\ X1\ X2) \Rightarrow ((k2\_xboole\_0\ X3\ X5 = k2\_xboole\_0\ X4\ X6) \Rightarrow (k12\_supinf\_2\ X2\ X3 = k12\_supinf\_2\ X2\ X4)))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v2\_valued\_0\ X0))) \Rightarrow (k12\_supinf\_2\ X0\ X1 = k1\_funct\_1\ X0\ X1) \tag{3}$$

Assume the following.

$$v3\_membered\ k1\_numbers \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))))\Rightarrow(\forall X2.(m2\_prob\_1\ X2\ X0\ X1)\Rightarrow((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X1\ k1\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k1\_numbers))))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge(((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge(m2\_prob\_1\ X2\ X0\ X1)))\Rightarrow(\forall X3.(m1\_prob\_4\ X3\ X0\ X1\ X2)\Rightarrow(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge(((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge(m2\_prob\_1\ X2\ X0\ X1)))\Rightarrow((v1\_funct\_1\ (k2\_prob\_4\ X0\ X1\ X2))\wedge((v1\_funct\_2\ (k2\_prob\_4\ X0\ X1\ X2)\ X1\ k7\_numbers)\wedge((v10\_valued\_0\ (k2\_prob\_4\ X0\ X1\ X2))\wedge((v6\_supinf\_2\ (k2\_prob\_4\ X0\ X1\ X2))\wedge((v4\_measure1\ (k2\_prob\_4\ X0\ X1\ X2)\ X0\ X1)\wedge(m1\_subset\_1\ (k2\_prob\_4\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers)))))))) \tag{7}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))))\Rightarrow(\forall X2.(m2\_prob\_1\ X2\ X0\ X1)\Rightarrow(k2\_prob\_4\ X0\ X1\ X2 = X2))) \tag{8}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v3\_valued\_0\ X0))\Rightarrow((v1\_relat\_1\ X0)\wedge(v2\_valued\_0\ X0)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(v3\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v3\_valued\_0\ X2)) \tag{11}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge ((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.(m2\_prob\_1\ X2\ X0\ X1)\Rightarrow(\forall X3.\ \forall X4.((X3\in X1)\wedge(X4\in X1))\Rightarrow(\forall X5.(m1\_prob\_4\ X5\ X0\ X1\ X2)\Rightarrow(\forall X6.(m1\_prob\_4\ X6\ X0\ X1\ X2)\Rightarrow((k2\_xboole\_0\ X3\ X5 = k2\_xboole\_0\ X4\ X6)\Rightarrow(k1\_funct\_1\ X2\ X3 = k1\_funct\_1\ X2\ X4)))))))$$