t26_prob_2 (TMRCywt-GLvvdW1owNzpyeMJ9hdmih3iL5Yg)

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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 $m1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_prob\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.(m1\_prob\_1\ X2\ X0\ X1) \Rightarrow (\forall X3.(m1\_prob\_1\ X3\ X0\ X1) \Rightarrow (\forall X4.(m2\_prob\_1\ X4\ X0\ X1) \Rightarrow ((r1\_prob\_2\ X0\ X1\ X4\ X2\ X3) \Rightarrow (r1\_prob\_2\ X0\ X1\ X4\ X2\ (k7\_prob\_1\ X0\ X1\ (k4\_prob\_1\ X0\ X1)\ X3)))))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.(m1\_prob\_1\ X2\ X0\ X1) \Rightarrow (\forall X3.(m1\_prob\_1\ X3\ X0\ X1) \Rightarrow (\forall X4.(m2\_prob\_1\ X4\ X0\ X1) \Rightarrow ((r1\_prob\_2\ X0\ X1\ X4\ X2\ X3) \Rightarrow (r1\_prob\_2\ X0\ X1\ X4\ X3\ X2)))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.(m1\_prob\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \wedge ((m1\_subset\_1\ X2\ X1) \wedge (m1\_subset\_1\ X3\ X1))) \Rightarrow (m1\_prob\_1\ (k7\_prob\_1\ X0\ X1\ X2\ X3)\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge ((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(m1\_prob\_1\ (k4\_prob\_1\ X0\ X1)\ X0\ X1) \quad (5)$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge ((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.(m1\_prob\_1\ X2\ X0\ X1)\Rightarrow(\forall X3.(m1\_prob\_1\ X3\ X0\ X1)\Rightarrow(\forall X4.(m2\_prob\_1\ X4\ X0\ X1)\Rightarrow((r1\_prob\_2\ X0\ X1\ X4\ X2\ X3)\Rightarrow(r1\_prob\_2\ X0\ X1\ X4\ (k7\_prob\_1\ X0\ X1\ (k4\_prob\_1\ X0\ X1)\ X2)\ (k7\_prob\_1\ X0\ X1\ (k4\_prob\_1\ X0\ X1)\ X3)))))))$$