

t42_member_1

(TMTabpuCGEm5R7wwSazmwBZAVL9Xwp4wS96)

October 27, 2020

Let $v2_membered : \iota \Rightarrow o$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (\forall X2. \\ & (v2_membered X2) \Rightarrow (\forall X3.(v2_membered X3) \Rightarrow (((r1_tarSKI \\ & X0 X1) \wedge (r1_tarSKI X2 X3)) \Rightarrow (r1_tarSKI (k8_member_1 X0 X2) (k8_member_1 \\ & X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(v2_membered X1) \Rightarrow ((r1_tarSKI X0 X1) \Rightarrow (v2_membered X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarSKI X0 X1) \wedge (r1_tarSKI X0 X2)) \Rightarrow (r1_tarSKI X0 (k3_xboole_0 X1 X2)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.r1_tarSKI (k3_xboole_0 X0 X1) X0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X1 X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \tag{6}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (\forall X2. \\ & (v2_membered X2) \Rightarrow (r1_tarSKI (k8_member_1 X0 (k3_xboole_0 X1 X2)) \\ & (k3_xboole_0 (k8_member_1 X0 X1) (k8_member_1 X0 X2)))))) \end{aligned}$$