

t119_member_1
(TMUNpv5Mo2wnitsMxygEjK8W1G7A9BUXtaM)

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Let $v1_membered : \iota \Rightarrow o$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X0 X2)) \Rightarrow (r1_tarSKI X0 (k3_xboole_0 X1 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1_membered X1) \Rightarrow ((r1_tarSKI X0 X1) \Rightarrow (v1_membered X0)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarSKI (k3_xboole_0 X0 X1) X0 \quad (3)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (\forall X1. (v1_membered X1) \Rightarrow (\forall X2. (v1_membered X2) \Rightarrow (\forall X3. (v1_membered X3) \Rightarrow (((r1_tarSKI X0 X1) \wedge (r1_tarSKI X2 X3)) \Rightarrow (r1_tarSKI (k15_member_1 X0 X2) (k15_member_1 X1 X3))))))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (6)$$

Theorem 1

$$\forall X0. (v1_membered X0) \Rightarrow (\forall X1. (v1_membered X1) \Rightarrow (\forall X2. (v1_membered X2) \Rightarrow (r1_tarSKI (k15_member_1 X0 (k3_xboole_0 X1 X2)) (k3_xboole_0 (k15_member_1 X0 X1) (k15_member_1 X0 X2))))))$$