

l4_int_4 (TMTAEfiAXwN- Brh2iPnmTnCFMMaMGXjbKDx1)

October 27, 2020

Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_integra2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_membered : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k23_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v5_membered X0) \Rightarrow (r1_tarski X0 k4_numbers) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v3_membered X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k1_integra2 X0 X1 = k23_member_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v5_membered X0) \wedge (v1_int_1 X1)) \Rightarrow (v5_membered (k23_member_1 X0 X1)) \quad (3)$$

Assume the following.

$$v5_membered k4_numbers \quad (4)$$

Assume the following.

$$\forall X0.(v4_membered X0) \Rightarrow (v3_membered X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (v1_xreal_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v5_membered X0) \Rightarrow (v4_membered X0) \quad (7)$$

Assume the following.

$$\forall X0.(v5_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v5_membered X1)) \quad (8)$$

Theorem 1

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 k4_numbers)) \Rightarrow (r1_tarski (k1_integra2 X1 X0) k4_numbers))$$