

l77_quaterni

(TMQVTHY1p1TsRCxCMQp6LrDKdUDwkgJpLQL)

October 27, 2020

Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k26_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k23_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k25_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k1_xcmplx_0 : \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Let $k11_quaterni : \iota$ be given. Let $k20_quaterni : \iota \Rightarrow \iota$ be given. Let $k12_quaterni : \iota$ be given. Let $k7_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k6_quaterni : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_quaterni : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (k26_quaterni X0 X1 = k7_quaterni X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2. (m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 k1_numbers) \Rightarrow (k6_quaterni X0 X1 X2 X3 = k7_quaterni \\ & (k7_quaterni (k23_quaterni X0 (k25_quaterni X1 k1_xcmplx_0)) \\ & (k25_quaterni X2 k11_quaterni)) (k25_quaterni X3 k12_quaterni)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v1_quaterni X0) \Rightarrow (\forall X1. (v1_quaterni X1) \Rightarrow (k7_quaterni X0 X1 = k6_quaterni (k7_real_1 (k17_quaterni X0) (k17_quaterni X1)) (k7_real_1 (k18_quaterni X0) (k18_quaterni X1)) (k7_real_1 (k19_quaterni X0) (k19_quaterni X1)) (k7_real_1 (k20_quaterni X0) (k20_quaterni X1)))))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (v1_quaterni (k7_quaterni X0 X1)) \quad (4)$$

Assume the following.

$$v1_quaterni k1_xcmplx_0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_quaterni X1))\Rightarrow(v1_quaterni (k25_quaterni X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_quaterni X1))\Rightarrow(v1_quaterni (k23_quaterni X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k7_real_1 X0 X1) k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(v1_quaterni X0)\Rightarrow(m1_subset_1 (k20_quaterni X0) k1_numbers) \quad (9)$$

Assume the following.

$$\forall X0.(v1_quaterni X0)\Rightarrow(m1_subset_1 (k19_quaterni X0) k1_numbers) \quad (10)$$

Assume the following.

$$\forall X0.(v1_quaterni X0)\Rightarrow(m1_subset_1 (k18_quaterni X0) k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v1_quaterni X0)\Rightarrow(m1_subset_1 (k17_quaterni X0) k1_numbers) \quad (12)$$

Assume the following.

$$m1_subset_1 k12_quaterni k1_quaterni \quad (13)$$

Assume the following.

$$m1_subset_1 k11_quaterni k1_quaterni \quad (14)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_quaterni)\Rightarrow(v1_quaterni X0) \quad (16)$$

Theorem 1

$$\forall X0.(v1_quaterni X0)\Rightarrow(\forall X1.(v1_quaterni X1)\Rightarrow(k26_quaterni X0 X1 = k26_quaterni (k26_quaterni (k23_quaterni (k7_real_1 (k17_quaterni X0) (k17_quaterni X1)) (k25_quaterni (k7_real_1 (k18_quaterni X0) (k18_quaterni X1)) k1_xcmplx_0)) (k25_quaterni (k7_real_1 (k19_quaterni X0) (k19_quaterni X1)) k11_quaterni)) (k25_quaterni (k7_real_1 (k20_quaterni X0) (k20_quaterni X1)) k12_quaterni)))$$