

l81_quaterni

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Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k26_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k21_quaterni : \iota$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k11_quaterni : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k20_quaterni : \iota \Rightarrow \iota$ be given. Let $k12_quaterni : \iota$ be given. Let $k6_quaterni : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_quaterni : \iota \Rightarrow \iota$ be given. Let $k15_quaterni : \iota \Rightarrow \iota$ be given. Let $k14_quaterni : \iota \Rightarrow \iota$ be given. Let $k13_quaterni : \iota \Rightarrow \iota$ be given. Let $k5_quaterni : \iota$ be given. Let $k4_quaterni : \iota$ be given. Assume the following.

$$\begin{aligned} & (k17_quaterni\ k11_quaterni = k6_numbers) \wedge ((k18_quaterni\ k11_quaterni = \\ & \quad k6_numbers) \wedge ((k19_quaterni\ k11_quaterni = np_1) \wedge ((k20_quaterni \\ & \quad k11_quaterni = k6_numbers) \wedge ((k17_quaterni\ k12_quaterni = k6_numbers) \wedge \\ & \quad ((k18_quaterni\ k12_quaterni = k6_numbers) \wedge ((k19_quaterni\ k12_quaterni = \\ & \quad \quad k6_numbers) \wedge (k20_quaterni\ k12_quaterni = np_1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v1_quaterni\ X0) \Rightarrow (X0 = k6_quaterni\ (k17_quaterni\ X0) \quad (k18_quaterni\ X0)\ (k19_quaterni\ X0)\ (k20_quaterni\ X0)) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0\ X0) \Rightarrow (k2_xcmplx_0\ X0\ k6_numbers = X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1\ X0\ k1_numbers) \wedge (v1_xreal_0\ X1)) \Rightarrow (k7_real_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_quaterni\ X0) \wedge (v1_quaterni\ X1)) \Rightarrow (k26_quaterni\ X0\ X1 = k7_quaterni\ X0\ X1) \quad (5)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k20_quaterni X0 = k16_quaterni X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k19_quaterni X0 = k15_quaterni X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k18_quaterni X0 = k14_quaterni X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k17_quaterni X0 = k13_quaterni X0) \quad (9)$$

Assume the following.

$$k12_quaterni = k5_quaterni \quad (10)$$

Assume the following.

$$k11_quaterni = k4_quaterni \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow \\ ((X0 = X1) \Rightarrow ((k17_quaterni X0 = X1) \wedge ((k18_quaterni X0 = k6_numbers) \wedge \\ ((k19_quaterni X0 = k6_numbers) \wedge (k20_quaterni X0 = k6_numbers)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k7_quaterni \\ X0 X1 = k6_quaterni (k7_real_1 (k17_quaterni X0) (k17_quaterni \\ X1)) (k7_real_1 (k18_quaterni X0) (k18_quaterni X1)) (k7_real_1 \\ (k19_quaterni X0) (k19_quaterni X1)) (k7_real_1 (k20_quaterni \\ X0) (k20_quaterni X1)))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (v1_xreal_0 (k14_quaterni X0)) \quad (14)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (v1_xreal_0 (k13_quaterni X0)) \quad (15)$$

Assume the following.

$$v1_quaterni k4_quaterni \quad (16)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (v1_xreal_0 (k16_quaterni X0)) \quad (17)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0)\Rightarrow(v1_xreal_0\ (k15_quaterni\ X0)) \quad (18)$$

Assume the following.

$$v1_quaterni\ k21_quaterni \quad (19)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0)\Rightarrow(m1_subset_1\ (k20_quaterni\ X0)\ k1_numbers) \quad (20)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0)\Rightarrow(m1_subset_1\ (k19_quaterni\ X0)\ k1_numbers) \quad (21)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0)\Rightarrow(m1_subset_1\ (k18_quaterni\ X0)\ k1_numbers) \quad (22)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0)\Rightarrow(m1_subset_1\ (k17_quaterni\ X0)\ k1_numbers) \quad (23)$$

Assume the following.

$$k21_quaterni = k6_numbers \quad (24)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (25)$$

Theorem 1 $\forall X0.(v1_quaterni\ X0)\Rightarrow(k26_quaterni\ X0\ k21_quaterni = X0).$