

t51_quaterni

(TMbEh9FfcHyLbcZcp6g3Vsv4HaKzEGQsozN)

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Let $k31_quaterni : \iota \Rightarrow \iota$ be given. Let $k1_xcmplx_0 : \iota$ be given. Let $k28_quaterni : \iota \Rightarrow \iota$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Let $k20_quaterni : \iota \Rightarrow \iota$ be given. Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k6_quaterni : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_quaterni : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & (k17_quaterni (k31_quaterni k1_xcmplx_0) = k6_numbers) \wedge ((k18_quaterni \\
 & \quad (k31_quaterni k1_xcmplx_0) = k1_real_1 np_1) \wedge ((k19_quaterni \\
 & \quad (k31_quaterni k1_xcmplx_0) = k6_numbers) \wedge (k20_quaterni (k31_quaterni \\
 & \quad \quad k1_xcmplx_0) = k6_numbers)))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. (v1_quaterni X0) \Rightarrow ((k17_quaterni (k31_quaterni X0) = \\
 & \quad k17_quaterni X0) \wedge ((k18_quaterni (k31_quaterni X0) = k1_real_1 \\
 & \quad (k18_quaterni X0)) \wedge ((k19_quaterni (k31_quaterni X0) = k1_real_1 \\
 & \quad (k19_quaterni X0)) \wedge (k20_quaterni (k31_quaterni X0) = k1_real_1 \\
 & \quad \quad (k20_quaterni X0))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. (v1_quaterni X0) \Rightarrow (k31_quaterni X0 = k6_quaterni (k17_quaterni \\
 & \quad X0) (k1_real_1 (k18_quaterni X0)) (k1_real_1 (k19_quaterni X0)) \\
 & \quad \quad (k1_real_1 (k20_quaterni X0)))
 \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. (v1_quaterni X0) \Rightarrow ((k17_quaterni (k28_quaterni X0) = \\
 & \quad k1_real_1 (k17_quaterni X0)) \wedge ((k18_quaterni (k28_quaterni X0) = \\
 & \quad k1_real_1 (k18_quaterni X0)) \wedge ((k19_quaterni (k28_quaterni X0) = \\
 & \quad k1_real_1 (k19_quaterni X0)) \wedge (k20_quaterni (k28_quaterni X0) = \\
 & \quad \quad k1_real_1 (k20_quaterni X0))))))
 \end{aligned} \tag{4}$$

Assume the following.

$$(k17_quaterni\ k1_xcmplx_0 = k6_numbers) \wedge ((k18_quaterni\ k1_xcmplx_0 = np_1) \wedge ((k19_quaterni\ k1_xcmplx_0 = k6_numbers) \wedge (k20_quaterni\ k1_xcmplx_0 = k6_numbers))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0) \Rightarrow (X0 = k6_quaterni\ (k17_quaterni\ X0) (k18_quaterni\ X0) (k19_quaterni\ X0) (k20_quaterni\ X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0) \Rightarrow (k28_quaterni\ X0 = k8_quaterni\ X0) \quad (7)$$

Assume the following.

$$v1_quaterni\ k1_xcmplx_0 \quad (8)$$

Assume the following.

$$\forall X0.(v1_quaterni\ X0) \Rightarrow (v1_quaterni\ (k8_quaterni\ X0)) \quad (9)$$

Theorem 1 $k31_quaterni\ k1_xcmplx_0 = k28_quaterni\ k1_xcmplx_0$.