

t50_quatern2 (TMVh- SPB3hMJXu2fNZNUXNkbc2ubHXnT3mZi)

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Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k18_quatern2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k3_quatern2 : \iota \Rightarrow \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k20_quaterni : \iota \Rightarrow \iota$ be given. Let $k1_quaterni : \iota$ be given. Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k18_quatern2 X0 X0 = k5_square_1 (k3_quatern2 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow \\ ((X0 = X1) \Rightarrow ((k17_quaterni X0 = X1) \wedge ((k18_quaterni X0 = k6_numbers) \wedge \\ ((k19_quaterni X0 = k6_numbers) \wedge (k20_quaterni X0 = k6_numbers)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (m1_subset_1 (k5_square_1 X0) k1_numbers) \quad (3)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (m1_subset_1 (k3_quatern2 X0) k1_numbers) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (m1_subset_1 (k18_quatern2 X0 X1) k1_quaterni) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_quaterni) \Rightarrow (v1_quaterni X0) \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow ((k17_quaterni (k18_quatern2 X0 \\ X0) = k5_square_1 (k3_quatern2 X0)) \wedge ((k18_quaterni (k18_quatern2 \\ X0 X0) = k6_numbers) \wedge ((k19_quaterni (k18_quatern2 X0 X0) = k6_numbers) \wedge \\ (k19_quaterni (k18_quatern2 X0 X0) = k6_numbers)))) \end{aligned}$$