

t13_quatern3
(TMMTHu29xrsPTg6ueqVhvTTNFPtJ7gTFJ7c)

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Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k3_quatern2 : \iota \Rightarrow \iota$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k27_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k31_quaterni : \iota \Rightarrow \iota$ be given. Let $k18_quatern2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow ((k17_quaterni (k18_quatern2 X0 \\ X0) = k5_square_1 (k3_quatern2 X0)) \wedge ((k18_quaterni (k18_quatern2 \\ X0 X0) = k6_numbers) \wedge ((k19_quaterni (k18_quatern2 X0 X0) = k6_numbers) \wedge \\ (k19_quaterni (k18_quatern2 X0 X0) = k6_numbers)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k18_quatern2 X0 X1 = k27_quaterni X0 (k31_quaterni X1))) \quad (2)$$

Theorem 1

$$\forall X0.(v1_quaterni X0) \Rightarrow (k5_square_1 (k3_quatern2 X0) = k17_quaterni (k27_quaterni X0 (k31_quaterni X0)))$$