

t55_quatern2
(TMaGz69JxJNid9QTxuCUi5rWa9p6S9fvd8L)

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Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k18_quatern2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_quaterni : \iota \Rightarrow \iota$ be given. Let $k27_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k31_quaterni : \iota \Rightarrow \iota$ be given. Let $k1_quaterni : \iota$ be given. Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k27_quaterni (k28_quaterni X0) X1 = k28_quaterni (k27_quaterni X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (m1_subset_1 (k31_quaterni X0) k1_quaterni) \quad (2)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (m1_subset_1 (k28_quaterni X0) k1_quaterni) \quad (3)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k18_quatern2 X0 X1 = k27_quaterni X0 (k31_quaterni X1))) \quad (4)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k18_quatern2 (k28_quaterni X0) X1 = k28_quaterni (k18_quatern2 X0 X1)))$$