

t2_quatern2 (TM- RZHRxKe3CNEedNY53eSag84oxvmJzQKez)

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Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k26_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k29_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (k26_quaterni X0 X1 = k7_quaterni X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_quaterni X0) \Rightarrow (\forall X1. (v1_quaterni X1) \Rightarrow (\forall X2. (v1_quaterni X2) \Rightarrow (k29_quaterni X1 X2 = k26_quaterni (k29_quaterni X1 X0) (k29_quaterni X0 X2)))) \quad (2)$$

Assume the following.

$$\forall X0. (v1_quaterni X0) \Rightarrow (\forall X1. (v1_quaterni X1) \Rightarrow (X0 = k26_quaterni (k29_quaterni X0 X1) X1)) \quad (3)$$

Assume the following.

$$\forall X0. (v1_quaterni X0) \Rightarrow (\forall X1. (v1_quaterni X1) \Rightarrow (X0 = k29_quaterni (k26_quaterni X0 X1) X1)) \quad (4)$$

Assume the following.

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

Theorem 1

$$\forall X0. (v1_quaterni X0) \Rightarrow (\forall X1. (v1_quaterni X1) \Rightarrow (\forall X2. (v1_quaterni X2) \Rightarrow (k26_quaterni (k26_quaterni X0 X1) X2 = k26_quaterni X0 (k26_quaterni X1 X2))))$$