

t23_quatern2
(TMKLR4NwPSCkc4ofz4uKaJNifve9884TWcS)

October 27, 2020

Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k27_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k29_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_quaterni : \iota \Rightarrow \iota$ be given. Let $k26_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_quaterni : \iota \Rightarrow \iota$ be given. Let $k10_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (\forall X2.(v1_quaterni X2) \Rightarrow (k27_quaterni (k26_quaterni X0 X1) X2 = k26_quaterni (k27_quaterni X0 X2) (k27_quaterni X1 X2)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (k29_quaterni X0 X1 = k9_quaterni X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (k28_quaterni X0 = k8_quaterni X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (k27_quaterni X0 X1 = k10_quaterni X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (k26_quaterni X0 X1 = k7_quaterni X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (v1_quaterni (k10_quaterni X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (v1_quaterni (k8_quaterni X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (k9_quaterni X0 X1 = k7_quaterni X0 (k8_quaterni X1))) \quad (9)$$

Theorem 1

$$\forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (\forall X2.(v1_quaterni X2) \Rightarrow (k27_quaterni (k29_quaterni X0 X1) X2 = k29_quaterni (k27_quaterni X0 X2) (k27_quaterni X1 X2))))$$