

t6\_quatern2  
(TMc8Gv5CLBn16zizNyu1dqQNrtBM75cDFdg)

October 27, 2020

Let  $v1\_quaterni : \iota \Rightarrow o$  be given. Let  $k26\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k29\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_quaterni : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (\forall X2. \\ & (v1\_quaterni X2) \Rightarrow (k29\_quaterni X1 X2 = k26\_quaterni (k29\_quaterni \\ & X1 X0) (k29\_quaterni X0 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (X0 = k29\_quaterni (k26\_quaterni X0 X1) X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_quaterni X0) \wedge (v1\_quaterni X1)) \Rightarrow (m1\_subset\_1 (k29\_quaterni X0 X1) k1\_quaterni) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_quaterni X0) \wedge (v1\_quaterni X1)) \Rightarrow (m1\_subset\_1 (k26\_quaterni X0 X1) k1\_quaterni) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_quaterni X0) \wedge (v1\_quaterni X1)) \Rightarrow (k26\_quaterni X0 X1 = k26\_quaterni X1 X0) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_quaterni) \Rightarrow (v1\_quaterni X0) \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (\forall X2. \\ & (v1\_quaterni X2) \Rightarrow (k26\_quaterni (k29\_quaterni X0 X1) X2 = k29\_quaterni \\ & (k26\_quaterni X0 X2) X1)))) \end{aligned}$$