

t83\_quaterni  
(TMWudYJLjKZ97piYL3QunbqNPD2kEWjTobz)

October 27, 2020

Let  $v1\_quaterni : \iota \Rightarrow o$  be given. Let  $k32\_quaterni : \iota \Rightarrow \iota$  be given. Let  $k29\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k28\_quaterni : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_quaterni : \iota$  be given. Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (k32\_quaterni (k28\_quaterni X0) = k32\_quaterni X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (k29\_quaterni X0 X1 = k28\_quaterni (k29\_quaterni X1 X0))) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_quaterni) \Rightarrow (v1\_quaterni X0) \quad (4)$$

**Theorem 1**

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (k32\_quaterni (k29\_quaterni X0 X1) = k32\_quaterni (k29\_quaterni X1 X0)))$$