

# t20\_quatern2 (TMUiqFETNQpcDVXD- KSf3KATHRuaL5PAUnL9)

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Let  $v1\_quaterni : \iota \Rightarrow o$  be given. Let  $k27\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k28\_quaterni : \iota \Rightarrow \iota$  be given. Let  $k2\_quatern2 : \iota$  be given. Let  $k8\_quaterni : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_quaterni : \iota$  be given. Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (k28\_quaterni X0 = k27\_quaterni (k28\_quaterni k2\_quatern2) X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (\forall X2.(v1\_quaterni X2) \Rightarrow (k27\_quaterni (k27\_quaterni X0 X1) X2 = k27\_quaterni X0 (k27\_quaterni X1 X2)))) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (k28\_quaterni X0 = k8\_quaterni X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (v1\_quaterni (k8\_quaterni X0)) \quad (4)$$

Assume the following.

$$m1\_subset\_1 k2\_quatern2 k1\_quaterni \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_quaterni X0) \wedge (v1\_quaterni X1)) \Rightarrow (m1\_subset\_1 (k27\_quaterni X0 X1) k1\_quaterni) \quad (6)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_quaterni) \Rightarrow (v1\_quaterni X0) \quad (7)$$

## Theorem 1

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (k27\_quaterni (k28\_quaterni X0) X1 = k28\_quaterni (k27\_quaterni X0 X1)))$$