

# t13\_quatern2

(TMXNrbFJS2XSrTUs8meRfoZNfhZPCDCfj1i)

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Let  $v1\_quaterni : \iota \Rightarrow o$  be given. Let  $k27\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_quatern2 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k32\_quaterni : \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k21\_quaterni : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_quaterni : \iota$  be given. Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (\forall X1.(v1\_quaterni X1) \Rightarrow (k32\_quaterni (k27\_quaterni X0 X1) = k3\_xcmplx\_0 (k32\_quaterni X0) (k32\_quaterni X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow ((k32\_quaterni X0 = k6\_numbers) \Rightarrow (X0 = k6\_numbers)) \quad (2)$$

Assume the following.

$$k32\_quaterni k21\_quaterni = k6\_numbers \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 X0 k6\_numbers = k6\_numbers) \quad (4)$$

Assume the following.

$$k1\_quatern2 = k21\_quaterni \quad (5)$$

Assume the following.

$$\forall X0.(v1\_quaterni X0) \Rightarrow (v1\_xreal\_0 (k32\_quaterni X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_quaterni X0) \wedge (v1\_quaterni X1)) \Rightarrow (m1\_subset\_1 (k27\_quaterni X0 X1) k1\_quaterni) \quad (7)$$

Assume the following.

$$v1\_quaterni \ k21\_quaterni \tag{8}$$

Assume the following.

$$k21\_quaterni = k6\_numbers \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 \ X0) \Rightarrow (v1\_xcmplx\_0 \ X0) \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 \ X0 \ k1\_quaterni) \Rightarrow (v1\_quaterni \ X0) \tag{11}$$

**Theorem 1**

$$\forall X0.(v1\_quaterni \ X0) \Rightarrow (k27\_quaterni \ X0 \ k1\_quatern2 = k6\_numbers)$$