

t60_quatern2
(TMTS1gFVL2hduxLQcEj3WzFisw6nobzEZdj)

October 27, 2020

Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k18_quatern2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_quaterni : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (\forall X2. \\ & (v1_quaterni X2) \Rightarrow (k18_quatern2 X0 (k26_quaterni X1 X2) = k26_quaterni \\ & (k18_quatern2 X0 X1) (k18_quatern2 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (\forall X2. \\ & (v1_quaterni X2) \Rightarrow (k18_quatern2 (k26_quaterni X0 X1) X2 = k26_quaterni \\ & (k18_quatern2 X0 X2) (k18_quatern2 X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_quaterni X0) \Rightarrow (\forall X1.(v1_quaterni X1) \Rightarrow (\forall X2. \\ & (v1_quaterni X2) \Rightarrow (k26_quaterni (k26_quaterni X0 X1) X2 = k26_quaterni \\ & X0 (k26_quaterni X1 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (m1_subset_1 (k26_quaterni X0 X1) k1_quaterni) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_quaterni X0) \wedge (v1_quaterni X1)) \Rightarrow (m1_subset_1 (k18_quatern2 X0 X1) k1_quaterni) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_quaterni) \Rightarrow (v1_quaterni X0) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_quaterni\ X0) \Rightarrow (\forall X1.(v1_quaterni\ X1) \Rightarrow (k18_quatern2 \\ & (k26_quaterni\ X0\ X1)\ (k26_quaterni\ X0\ X1) = k26_quaterni\ (k26_quaterni \\ & (k26_quaterni\ (k18_quatern2\ X0\ X0)\ (k18_quatern2\ X0\ X1))\ (k18_quatern2 \\ & X1\ X0))\ (k18_quatern2\ X1\ X1))) \end{aligned}$$