

t24_quaterni (TMVjew- pdXxySVg4ZaQNjXQb63DEqLxgCE9G)

October 27, 2020

Let $v1_quaterni : \iota \Rightarrow o$ be given. Let $k6_quaterni : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_quaterni : \iota \Rightarrow \iota$ be given. Let $k18_quaterni : \iota \Rightarrow \iota$ be given. Let $k19_quaterni : \iota \Rightarrow \iota$ be given. Let $k20_quaterni : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow (\exists X1.(m1_subset_1 X1 k1_numbers) \wedge \\ (\exists X2.(m1_subset_1 X2 k1_numbers) \wedge (\exists X3.(m1_subset_1 \\ X3 k1_numbers) \wedge (\exists X4.(m1_subset_1 X4 k1_numbers) \wedge (X0 = \\ k6_quaterni X1 X2 X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k1_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 k1_numbers) \Rightarrow ((k17_quaterni (k6_quaterni X0 X1 \\ X2 X3) = X0) \wedge ((k18_quaterni (k6_quaterni X0 X1 X2 X3) = X1) \wedge ((k19_quaterni \\ (k6_quaterni X0 X1 X2 X3) = X2) \wedge (k20_quaterni (k6_quaterni X0 X1 \\ X2 X3) = X3))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_quaterni X0) \Rightarrow (X0 = k6_quaterni (k17_quaterni X0) \\ (k18_quaterni X0) (k19_quaterni X0) (k20_quaterni X0)) \end{aligned}$$