

t30_metric_2

(TMKJcWq1eZv2VmV4B4CB8U6Un1Ycb2fcbcV)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_metric_1 : \iota \Rightarrow o$ be given. Let $v8_metric_1 : \iota \Rightarrow o$ be given. Let $v9_metric_1 : \iota \Rightarrow o$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $k6_metric_2 : \iota \Rightarrow \iota$ be given. Let $k7_metric_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_metric_2 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r4_metric_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((\forall X3. (m1_subset_1 \\ & X3 X0) \Rightarrow ((X3 \in X1) \Rightarrow (X3 \in X2))) \Rightarrow (r1_tarski X1 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v8_metric_1 \\ & X0) \wedge ((v9_metric_1 X0) \wedge (l1_metric_1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k2_metric_2 X0)) \Rightarrow ((X1 \in k7_metric_2 X0) \Leftrightarrow (\exists X2. (m1_subset_1 \\ & X2 (k2_metric_2 X0)) \wedge (\exists X3. (m1_subset_1 X3 k1_numbers) \wedge \\ & (r4_metric_2 X0 X2 X1 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v8_metric_1 \\ & X0) \wedge ((v9_metric_1 X0) \wedge (l1_metric_1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k2_metric_2 X0)) \Rightarrow ((X1 \in k6_metric_2 X0) \Leftrightarrow (\exists X2. (m1_subset_1 \\ & X2 (k2_metric_2 X0)) \wedge (\exists X3. (m1_subset_1 X3 k1_numbers) \wedge \\ & (r4_metric_2 X0 X1 X2 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v8_metric_1 \\ & X0) \wedge ((v9_metric_1 X0) \wedge (l1_metric_1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k2_metric_2 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (k2_metric_2 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 k1_numbers) \Rightarrow ((r4_metric_2 \\ & X0 X1 X2 X3) \Rightarrow (r4_metric_2 X0 X2 X1 X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_metric_1 X0)) \Rightarrow (m1_subset_1 (k7_metric_2 X0) (k1_zfmisc_1 (k2_metric_2 X0))) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_metric_1 X0)) \Rightarrow (m1_subset_1 (k6_metric_2 X0) (k1_zfmisc_1 (k2_metric_2 X0))) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (7)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v8_metric_1 X0) \wedge ((v9_metric_1 X0) \wedge (l1_metric_1 X0))))) \Rightarrow (k6_metric_2 X0 = k7_metric_2 X0)$$