

t59_interval1

(TMH1mERLCarDaxxFZYJKPBY3jo7aFU3uWrW)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_roughs_1 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m2_interval1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_interval1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_interval1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_interval1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k2_xtuple_0 (k4_tarski X0 X1) = X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((v3_roughs_1 X0) \wedge (l1_orders_2 X0) \wedge (l1_orders_2 X0))) \wedge ((m2_interval1 X1 X0) \wedge (m2_interval1 X2 X0))) \Rightarrow (m2_interval1 (k17_interval1 X0 X1 X2) X0) \quad (2)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_roughs_1 X0) \wedge (l1_orders_2 X0))) \Rightarrow (\forall X1. (m2_interval1 X1 X0) \Rightarrow (\forall X2. (m2_interval1 X2 X0) \Rightarrow (k17_interval1 X0 X1 X2 = k4_tarski (k9_subset_1 (u1_struct_0 X0) (k14_interval1 X0 X1) (k14_interval1 X0 X2)) (k9_subset_1 (u1_struct_0 X0) (k15_interval1 X0 X1) (k15_interval1 X0 X2)))))) \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_roughs_1 X0) \wedge (l1_orders_2 X0))) \Rightarrow (\forall X1. (m2_interval1 X1 X0) \Rightarrow (k15_interval1 X0 X1 = k2_xtuple_0 X1)) \quad (4)$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_roughs_1 X0) \wedge (l1_orders_2 X0))) \Rightarrow (\forall X1. (m2_interval1 X1 X0) \Rightarrow (\forall X2. (m2_interval1 X2 X0) \Rightarrow (k15_interval1 X0 (k17_interval1 X0 X1 X2) = k9_subset_1 (u1_struct_0 X0) (k15_interval1 X0 X1) (k15_interval1 X0 X2))))$$