

t26_interva1 (TM- StzGH2ZVBK mHdsFcnrooAB9MokyJHedhX)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_interval1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_interval1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k2_interval1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_interval1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((r1_tarski \\ X1 X2) \Rightarrow ((\neg v1_xboole_0 (k2_interval1 X0 X1 X2)) \wedge ((v1_interval1 (\\ k2_interval1 X0 X1 X2) X0) \wedge (m1_subset_1 (k2_interval1 X0 X1 X2) (k1_zfmisc_1 \\ (k1_zfmisc_1 X0)))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ (m1_interval1 X1 X0)) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ X0)) \wedge (\exists X3.(m1_subset_1 X3 (k1_zfmisc_1 X0)) \wedge ((r1_tarski \\ X2 X3) \wedge (X1 = k2_interval1 X0 X2 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ (m1_interval1 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ X0)) \Rightarrow ((X2 = k5_interval1 X0 X1) \Leftrightarrow (\exists X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ X0)) \wedge (X1 = k2_interval1 X0 X2 X3)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ (m1_interval1 X1 X0)) \Rightarrow ((\neg v1_xboole_0 X1) \wedge ((v1_interval1 X1 X0) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \end{aligned}$$