

t13_funcop_1

(TMdw5TDRdfm2WgxEY89nQrcfnhXwNpHqBiN)

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Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) (k1_tarski X1)) \Rightarrow (X0 = X1) \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \neq k1_xboole_0) \wedge ((X1 \neq k1_xboole_0) \wedge (\neg (k9_xtuple_0 (k2_zfmisc_1 X0 X1) = X0) \wedge (k10_xtuple_0 (k2_zfmisc_1 X0 X1) = X1))) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k10_xtuple_0 (k2_zfmisc_1 X0 X1)) X1 \tag{3}$$

Assume the following.

$$\forall X0. (k9_xtuple_0 (k2_funcop_1 k1_xboole_0 X0) = k1_xboole_0) \wedge (k10_xtuple_0 (k2_funcop_1 k1_xboole_0 X0) = k1_xboole_0) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. k2_funcop_1 X0 X1 = k2_zfmisc_1 X0 (k1_tarski X1) \tag{5}$$

Theorem 1

$$\forall X0. \forall X1. (k9_xtuple_0 (k2_funcop_1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple_0 (k2_funcop_1 X0 X1)) (k1_tarski X1))$$