t63_relset_2 (TMapum4Xji5bVnfawEniRcfcTiSpgtQoFU3)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_relset\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X1)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow ((r1\_tarski\ X2\ (k6\_relset\_2\ X1\ X0\ X3\ (k3\_relset\_1\ X0\ X1\ X4))) \Leftrightarrow (r1\_tarski\ X3\ (k6\_relset\_2\ X0\ X1\ X2\ X4))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow ((r1\_tarski\ X2\ X3) \Rightarrow (r1\_tarski\ (k6\_relset\_2\ X0\ X1\ X3\ X4)\ (k6\_relset\_2\ X0\ X1\ X2\ X4))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow (m1\_subset\_1\ (k6\_relset\_2\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (m1\_subset\_1\ (k3\_relset\_1\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X0)) \qquad (6)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X1)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow ((k6\_relset\_2\ X0\ X1\ X2\ X4 = k6\_relset\_2\ X0\ X1\ (k6\_relset\_2\ X1\ X0\ (k6\_relset\_2\ X0\ X1\ X2\ X4)\ (k3\_relset\_1\ X0\ X1\ X4))\ X4) \wedge (k6\_relset\_2\ X1\ X0\ X3\ (k3\_relset\_1\ X0\ X1\ X4) = k6\_relset\_2\ X1\ X0\ (k6\_relset\_2\ X0\ X1\ (k6\_relset\_2\ X1\ X0\ X3\ (k3\_relset\_1\ X0\ X1\ X4))\ X4)\ (k3\_relset\_1\ X0\ X1\ X4)))))$$