

t18_twoscomp (TM-
LqxDXBKxKVbLEQ2LN5Dmm7WiN3bWucRha)

October 27, 2020

Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_twoscomp : \iota$ be given. Let $k11_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_0 : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_margrel1 : \iota$ be given. Let $k2_xboolean : \iota$ be given. Let $k7_margrel1 : \iota$ be given. Let $k1_xboolean : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_margrel1 : \iota$ be given. Let $k10_margrel1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboolean : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (2)$$

Assume the following.

$$k3_xcmplx_0 np_0 np_1 = np_0 \quad (3)$$

Assume the following.

$$k8_margrel1 = k2_xboolean \quad (4)$$

Assume the following.

$$k7_margrel1 = k1_xboolean \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k6_margrel1) \wedge (m1_subset_1 X1 k6_margrel1)) \Rightarrow (k10_margrel1 X0 X1 = k4_xboolean X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboolean\ X0)\wedge(v1_xboolean\ X1))\Rightarrow(k4_xboolean\ X0\ X0 = X0) \quad (8)$$

Assume the following.

$$v1_xboolean\ k2_xboolean \quad (9)$$

Assume the following.

$$v1_xboolean\ k1_xboolean \quad (10)$$

Assume the following.

$$m1_subset_1\ k8_margrel1\ k6_margrel1 \quad (11)$$

Assume the following.

$$m1_subset_1\ k7_margrel1\ k6_margrel1 \quad (12)$$

Assume the following.

$$(v1_funct_1\ k17_twoscomp)\wedge((v1_funct_2\ k17_twoscomp\ (k4_finseq_2\ np_3\ k6_margrel1)\ k6_margrel1)\wedge(m1_subset_1\ k17_twoscomp\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k4_finseq_2\ np_3\ k6_margrel1)\ k6_margrel1)))) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboolean\ X0)\Rightarrow(\forall X1.(v1_xboolean\ X1)\Rightarrow(k4_xboolean\ X0\ X1 = k3_xcplx_0\ X0\ X1)) \quad (14)$$

Assume the following.

$$k2_xboolean = np_1 \quad (15)$$

Assume the following.

$$k1_xboolean = k6_numbers \quad (16)$$

Assume the following.

$$\forall X0.((v1_funct_1\ X0)\wedge((v1_funct_2\ X0\ (k4_finseq_2\ np_3\ k6_margrel1)\ k6_margrel1)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k4_finseq_2\ np_3\ k6_margrel1)\ k6_margrel1))))))\Rightarrow((X0 = k17_twoscomp)\Leftrightarrow(\forall X1.(m1_subset_1\ X1\ k6_margrel1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ k6_margrel1)\Rightarrow(\forall X3.(m1_subset_1\ X3\ k6_margrel1)\Rightarrow(k1_funct_1\ X0\ (k11_finseq_1\ X1\ X2\ X3) = k10_margrel1\ (k10_margrel1\ X1\ X2\ X3)))))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboolean\ X0)\wedge(v1_xboolean\ X1))\Rightarrow(k4_xboolean\ X0\ X1 = k4_xboolean\ X1\ X0) \quad (18)$$

Theorem 1

$$\begin{aligned} & (k1_funct_1\ k17_twoscomp\ (k11_finseq_1\ k6_numbers\ k6_numbers \\ & k6_numbers) = k6_numbers) \wedge ((k1_funct_1\ k17_twoscomp\ (k11_finseq_1 \\ & k6_numbers\ k6_numbers\ np_1) = k6_numbers) \wedge ((k1_funct_1\ k17_twoscomp \\ & (k11_finseq_1\ k6_numbers\ np_1\ k6_numbers) = k6_numbers) \wedge ((k1_funct_1 \\ & k17_twoscomp\ (k11_finseq_1\ k6_numbers\ np_1\ np_1) = k6_numbers) \wedge \\ & ((k1_funct_1\ k17_twoscomp\ (k11_finseq_1\ np_1\ k6_numbers\ k6_numbers) = \\ & k6_numbers) \wedge ((k1_funct_1\ k17_twoscomp\ (k11_finseq_1\ np_1\ k6_numbers \\ & np_1) = k6_numbers) \wedge ((k1_funct_1\ k17_twoscomp\ (k11_finseq_1 \\ & np_1\ np_1\ k6_numbers) = k6_numbers) \wedge (k1_funct_1\ k17_twoscomp \\ & (k11_finseq_1\ np_1\ np_1\ np_1) = np_1)))))) \end{aligned}$$