

t21_twoscomp
(TMVi7b1Ni1uueEG6UCfPxwp35YcTbXHiChk)

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Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20_twoscomp : \iota$ 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 $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_margrel1 : \iota$ be given. Let $k9_margrel1 : \iota \Rightarrow \iota$ be given. Let $k3_xboolean : \iota \Rightarrow \iota$ be given. Let $k7_margrel1 : \iota$ be given. Let $k1_xboolean : \iota$ 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.

$$k6_xcmplx_0 np_1 np_0 = np_1 \quad (4)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k6_margrel1) \Rightarrow (k9_margrel1 X0 = k3_xboolean X0) \quad (5)$$

Assume the following.

$$k7_margrel1 = k1_xboolean \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k6_margrel1)\wedge(m1_subset_1 X1 k6_margrel1))\Rightarrow(k10_margrel1 X0 X1 = k4_xboolean X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k6_margrel1)\Rightarrow(k9_margrel1 (k9_margrel1 X0) = X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k6_margrel1)\wedge(m1_subset_1 X1 k6_margrel1))\Rightarrow(k10_margrel1 X0 X0 = X0) \quad (10)$$

Assume the following.

$$v1_xboolean k1_xboolean \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k6_margrel1)\Rightarrow(m1_subset_1 (k9_margrel1 X0) k6_margrel1) \quad (12)$$

Assume the following.

$$m1_subset_1 k7_margrel1 k6_margrel1 \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboolean X0)\Rightarrow(v1_xboolean (k3_xboolean X0)) \quad (14)$$

Assume the following.

$$(v1_funct_1 k20_twoscomp)\wedge((v1_funct_2 k20_twoscomp (k4_finseq_2 np_3 k6_margrel1) k6_margrel1)\wedge(m1_subset_1 k20_twoscomp (k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 np_3 k6_margrel1) k6_margrel1)))) \quad (15)$$

Assume the following.

$$\forall X0.(v1_xboolean X0)\Rightarrow(\forall X1.(v1_xboolean X1)\Rightarrow(k4_xboolean X0 X1 = k3_xcmplx_0 X0 X1)) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xboolean X0)\Rightarrow(k3_xboolean X0 = k6_xcmplx_0 np_1 X0) \quad (17)$$

Assume the following.

$$k1_xboolean = k6_numbers \quad (18)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 (k4_finseq_2 np_3 \\
& k6_margrel1) k6_margrel1) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (k4_finseq_2 np_3 k6_margrel1) k6_margrel1)))))) \Rightarrow ((X0 = k20_twoscomp) \Leftrightarrow \\
& (\forall X1.(m1_subset_1 X1 k6_margrel1) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 k6_margrel1) \Rightarrow (\forall X3.(m1_subset_1 X3 k6_margrel1) \Rightarrow (k1_funct_1 \\
& X0 (k11_finseq_1 X1 X2 X3) = k10_margrel1 (k10_margrel1 (k9_margrel1 \\
& X1) (k9_margrel1 X2)) (k9_margrel1 X3))))))
\end{aligned} \tag{19}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xboolean X0) \wedge (v1_xboolean X1)) \Rightarrow (k4_xboolean X0 X1 = k4_xboolean X1 X0) \tag{20}$$

Theorem 1

$$\begin{aligned}
& (k1_funct_1 k20_twoscomp (k11_finseq_1 k6_numbers k6_numbers \\
& k6_numbers) = np_1) \wedge ((k1_funct_1 k20_twoscomp (k11_finseq_1 \\
& k6_numbers k6_numbers np_1) = k6_numbers) \wedge ((k1_funct_1 k20_twoscomp \\
& (k11_finseq_1 k6_numbers np_1 k6_numbers) = k6_numbers) \wedge ((k1_funct_1 \\
& k20_twoscomp (k11_finseq_1 k6_numbers np_1 np_1) = k6_numbers) \wedge \\
& ((k1_funct_1 k20_twoscomp (k11_finseq_1 np_1 k6_numbers k6_numbers) = \\
& k6_numbers) \wedge ((k1_funct_1 k20_twoscomp (k11_finseq_1 np_1 k6_numbers \\
& np_1) = k6_numbers) \wedge ((k1_funct_1 k20_twoscomp (k11_finseq_1 \\
& np_1 np_1 k6_numbers) = k6_numbers) \wedge (k1_funct_1 k20_twoscomp \\
& (k11_finseq_1 np_1 np_1 np_1) = k6_numbers))))))
\end{aligned}$$