

t20_matrixc1

(TMFmya9i4Wem3HMNhaHiAiuARbZpdQpRwGe)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $k5_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k27_binop_2 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k15_complex1 \\ (k2_xcmplx_0 X0 X1) = k8_complex1 (k15_complex1 X0) (k15_complex1 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_subset_1 X0 k2_numbers) \wedge (m1_subset_1 \\ X1 k2_numbers)) \Rightarrow (k8_complex1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.(((v1_funct_1 X1) \wedge \\ ((v1_funct_2 X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))))) \wedge ((m1_subset_1 X2 X0) \wedge \\ (m1_subset_1 X3 X0))) \Rightarrow (k5_binop_1 X0 X1 X2 X3 = k1_binop_1 X1 X2 X3) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (\\ k3_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_complex1 (k15_complex1 X0) = X0) \tag{5}$$

Assume the following.

$$(v1_funct_1 \ k27_binop_2) \wedge ((v1_funct_2 \ k27_binop_2 \ (k2_zfmisc_1 \ k2_numbers \ k2_numbers) \ k2_numbers) \wedge (m1_subset_1 \ k27_binop_2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ (k2_zfmisc_1 \ k2_numbers \ k2_numbers) \ k2_numbers)))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (m1_subset_1 \ (k15_complex1 \ X0) \ k2_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_funct_1 \ X0) \wedge ((v1_funct_2 \ X0 \ (k2_zfmisc_1 \ k2_numbers \ k2_numbers) \ k2_numbers) \wedge (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ (k2_zfmisc_1 \ k2_numbers \ k2_numbers) \ k2_numbers)))))) \Rightarrow ((X0 = k27_binop_2) \Leftrightarrow \\ (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow (\forall X2.(v1_xcmplx_0 \ X2) \Rightarrow (k1_binop_1 \ X0 \ X1 \ X2 = k3_binop_2 \ X1 \ X2)))) \quad (8) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k2_numbers) \Rightarrow (v1_xcmplx_0 \ X0) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 \ X0 \ k2_numbers) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ k2_numbers) \Rightarrow (k15_complex1 \ (k5_binop_1 \ k2_numbers \ k27_binop_2 \ X0 \ (k15_complex1 \ X1)) = k5_binop_1 \ k2_numbers \ k27_binop_2 \ (k15_complex1 \ X0) \ X1)) \end{aligned}$$