

l18_xreal_0
(TMLGZ6e2pRCmT8hRhZwDJ1xi2VBJJ6x59Aa)

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Let $c5_xreal_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $c3_xreal_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $c6_xreal_0 : \iota$ be given. Let $c4_xreal_0 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$k6_numbers = k1_xboole_0 \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow \\ (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow ((X0 = k5_arytm_0 X1 X2) \Rightarrow \\ ((X2 = k6_numbers) \wedge (X0 = X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$m1_subset_1 np_1 k1_numbers \tag{3}$$

Assume the following.

$$\begin{aligned} (k4_xcmplx_0 np_1 = k5_arytm_0 c5_xreal_0 c6_xreal_0) \wedge (k6_numbers = \\ k5_arytm_0 (k1_arytm_0 c3_xreal_0 c5_xreal_0) (k1_arytm_0 \\ c4_xreal_0 c6_xreal_0)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 X0))) \tag{5}$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (m1_subset_1 X1 k1_numbers)) \Rightarrow (m1_subset_1 (k1_arytm_0 X0 X1) k1_numbers) \tag{7}$$

Assume the following.

$$m1_subset_1 \ c6_xreal_0 \ k1_numbers \quad (8)$$

Assume the following.

$$m1_subset_1 \ c5_xreal_0 \ k1_numbers \quad (9)$$

Assume the following.

$$m1_subset_1 \ c4_xreal_0 \ k1_numbers \quad (10)$$

Assume the following.

$$m1_subset_1 \ c3_xreal_0 \ k1_numbers \quad (11)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (v7_ordinal1 \ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (v1_xreal_0 \ X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (14)$$

Theorem 1

$$(c5_xreal_0 = k4_xcmplx_0 \ np_1) \wedge (k1_arytm_0 \ c3_xreal_0 \ c5_xreal_0 = k6_numbers)$$