

t48_measure6
(TMYBU7R3wQpJNB2ryXgapj4tvShyyuC2rv3)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_measure6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k17_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 X2) \Rightarrow (k17_member_1 X0 (k3_binop_2 X1 X2) = k17_member_1 \\ & (k17_member_1 X0 X2) X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 \\ & X1)) \Rightarrow (k7_real_1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (\\ & k3_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v3_membered X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k2_measure6 \\ & X0 X1 = k17_member_1 X0 X1) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v3_membered X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v3_membered \\ & (k17_member_1 X0 X1)) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 \\ & (k2_xcmplx_0 X0 X1)) \end{aligned} \tag{6}$$

Assume the following.

$$v3_membered\ k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v3_membered\ X0) \Rightarrow (v1_membered\ X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Rightarrow (v1_xcmplx_0\ X0) \quad (9)$$

Assume the following.

$$\forall X0.(v3_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0)) \Rightarrow (v3_membered\ X1)) \quad (10)$$

Assume the following.

$$\forall X0.(v3_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v1_xreal_0\ X1)) \quad (11)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow (\forall X1.(m1_subset_1\ X1\ k1_numbers) \Rightarrow (\forall X2.(m1_subset_1\ X2\ k1_numbers) \Rightarrow (k2_measure6\ (k2_measure6\ X0\ X2)\ X1 = k2_measure6\ X0\ (k7_real_1\ X1\ X2))))$$