

t17_prob_2
(TMWL7sVmgfQTZJmfzg7sYJtL4wE7oDcnNj3)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m1_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (m2_prob_1 X3 X0 X1) \Rightarrow (k1_seq_1 X3 (k7_prob_1 X0 X1 (k4_prob_1 X0 \\ & X1) X2) = k9_real_1 np_1 (k1_seq_1 X3 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 (k2_xcmplx_0 X1 X2)) \Leftrightarrow (r1_xxreal_0 \\ & (k6_xcmplx_0 X0 X1) X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_xcmplx_0 X0 k6_numbers = X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$(m2_subset_1 \ np_0 \ k1_numbers \ k5_numbers) \wedge ((m1_subset_1 \ np_0 \ k5_numbers) \wedge (m1_subset_1 \ np_0 \ k1_numbers)) \quad (6)$$

Assume the following.

$$v1_xboole_0 \ np_0 \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_numbers) \wedge (v1_xreal_0 \ X1)) \Rightarrow (k9_real_1 \ X0 \ X1 = k6_xcmplx_0 \ X0 \ X1) \quad (8)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (9)$$

Assume the following.

$$v3_membered \ k1_numbers \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 \ X0) \wedge ((\neg v1_xboole_0 \ X1) \wedge \\ & ((v1_prob_1 \ X1 \ X0) \wedge (v4_prob_1 \ X1 \ X0) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \\ & (k1_zfmisc_1 \ X0)))))) \Rightarrow (\forall X2. (m2_prob_1 \ X2 \ X0 \ X1) \Rightarrow ((v1_funct_1 \\ & X2) \wedge ((v1_funct_2 \ X2 \ X1 \ k1_numbers) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X1 \ k1_numbers)))))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v3_valued_0 \ X0))) \Rightarrow (m1_subset_1 \ (k1_seq_1 \ X0 \ X1) \ k1_numbers) \quad (12)$$

Assume the following.

$$\forall X0. (v1_xreal_0 \ X0) \Rightarrow (v1_xcmplx_0 \ X0) \quad (13)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (v1_relat_1 \ X2) \quad (15)$$

Assume the following.

$$\forall X0. \forall X1. (v3_membered \ X1) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (v3_valued_0 \ X2)) \quad (16)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m1_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (m2_prob_1 X3 X0 X1) \Rightarrow ((\neg(\neg r1_xxreal_0 np_1 (k1_seq_1 X3 X2)) \wedge \\ & (r1_xxreal_0 (k1_seq_1 X3 (k7_prob_1 X0 X1 (k4_prob_1 X0 X1) X2)) \\ & k6_numbers)) \wedge (\neg(\neg r1_xxreal_0 (k1_seq_1 X3 (k7_prob_1 X0 X1 (k4_prob_1 \\ & X0 X1) X2)) k6_numbers) \wedge (r1_xxreal_0 np_1 (k1_seq_1 X3 X2))))))) \end{aligned}$$