

t12_mesfunc6
(TMRWyzbGk6i4sC1CjwriyEAQbVrCsRxZTjw)

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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 $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k8_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k15_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_mesfunc5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_measure6 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (k9_subset_1 X0 X1 X2 = k3_xboole_0 X1 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k8_subset_1 X0 X1 X2 = k3_xboole_0 X1 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \wedge (v1_xxreal_0 X2)) \Rightarrow (k15_mesfunc1 X0 X1 X2 = k11_mesfunc1 X1 X2) \quad (3)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Rightarrow (m1_subset_1 X2 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((v1_funct_1 X1) \wedge \\ m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\ ((v1_funct_1 (k1_mesfunc5 X0 X1) \wedge (m1_subset_1 (k1_mesfunc5 \\ X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\ m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow (\\ k1_mesfunc5 X0 X1 = X1) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow (\forall X3. (\\ m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow ((r1_mesfunc6 X0 X1 X2 X3) \Leftrightarrow \\ (r1_mesfunc1 X0 X1 (k1_mesfunc5 X0 X2) X3)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (k1_measure6 X0 = X0) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\forall X3. (\\ m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow ((r1_mesfunc1 X0 X1 X2 X3) \Leftrightarrow \\ (\forall X4. (v1_xreal_0 X4) \Rightarrow (k9_subset_1 X0 X3 (k15_mesfunc1 \\ X0 X2 (k1_measure6 X4) \in X1)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (k9_subset_1 X0 X1 X2 = k9_subset_1 X0 X2 X1) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (12)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge (v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow (\forall X3.(\\ & m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow ((r1_mesfunc6 X0 X1 X2 X3) \Leftrightarrow \\ & (\forall X4.(v1_xreal_0 X4) \Rightarrow (k8_subset_1 X0 X3 (k11_mesfunc1 \\ & X2 X4) \in X1)))))) \end{aligned}$$