

t19_topgen_5 (TMN-
wMd1QyGjdCDPFKkX4upQ3oH2Ne7E9GDk)

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Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_topgen_5 : \iota$ be given. Let $k2_topgen_5 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (r1_xxreal_0 X0 X0) \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \quad (7)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski \ X0 \ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (9)$$

Assume the following.

$$k1_xboole_0 = the \ (\lambda X0 : \iota.v1_xboole_0 \ X0) \quad (10)$$

Assume the following.

$$\begin{aligned} k2_topgen_5 = ReplSep2 \ (toiset \ (\lambda X0 : \iota.m1_subset_1 \ X0 \ k1_numbers)) \\ (\lambda X0 : \iota.toiset \ (\lambda X1 : \iota.m1_subset_1 \ X1 \ k1_numbers)) \ (\\ \lambda X0 : \iota.\lambda X1 : \iota.r1_xxreal_0 \ k6_numbers \ X1) \ (\lambda X0 : \iota. \\ \lambda X1 : \iota.k19_euclid \ X0 \ X1) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} k1_topgen_5 = ReplSep \ (toiset \ (\lambda X0 : \iota.m1_subset_1 \ X0 \ k1_numbers)) \\ (\lambda X0 : \iota.True) \ (\lambda X0 : \iota.k19_euclid \ X0 \ k6_numbers) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (v1_xxreal_0 \ X0) \quad (13)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (v1_finset_1 \ X0) \quad (15)$$

Theorem 1 $r1_tarski \ k1_topgen_5 \ k2_topgen_5$.