

t6_nat_d (TMH-
siVYMY1oiwP8QX97qt57E6U2iC9ANQt9)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_nat_d : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v4_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ & ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v7_ordinal1\ X0) \wedge (v7_ordinal1\ X1)) \Rightarrow (r1_nat_d\ X0\ X1) \Leftrightarrow (r1_int_1\ X0\ X1) \quad (2)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0. (v1_int_1\ X0) \Rightarrow ((r1_int_1\ X0\ k6_numbers) \wedge ((r1_int_1\ np_1\ X0) \wedge (r1_int_1\ (k4_xcmplx_0\ np_1)\ X0))) \quad (5)$$

Assume the following.

$$k1_xboole_0 = the\ (\lambda X0 : \iota. v1_xboole_0\ X0) \quad (6)$$

Assume the following.

$$\forall X0. (v7_ordinal1\ X0) \Leftrightarrow (X0 \in k4_ordinal1) \quad (7)$$

Assume the following.

$$\forall X0.(X0 = k4_ordinal1) \Leftrightarrow ((k1_xboole_0 \in X0) \wedge ((v4_ordinal1 X0) \wedge ((v3_ordinal1 X0) \wedge (\forall X1.(v3_ordinal1 X1) \Rightarrow (((k1_xboole_0 \in X1) \wedge (v4_ordinal1 X1)) \Rightarrow (r1_tarski X0 X1))))))) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (10)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((r1_nat_d X0 k6_numbers) \wedge (r1_nat_d np_1 X0))$$