

l6_euler_2

(TMd6aF8eLzwwYTytsQc3hgkUYherXhXpBSy)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k6_int_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k19_binop_2 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (((r1_xxreal_0 \\ k6_numbers X1) \Rightarrow ((r1_xxreal_0 X0 X1) \vee (k6_int_1 X1 X0 = X1))) \wedge ((\\ r1_xxreal_0 (k4_xcmplx_0 X0) X1) \Rightarrow ((r1_xxreal_0 k6_numbers X1) \vee \\ (k6_int_1 X1 X0 = k2_xcmplx_0 X0 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 k6_numbers) \Rightarrow (\\ \forall X1.(v1_int_1 X1) \Rightarrow ((k6_int_1 X1 X0 = k6_numbers) \Leftrightarrow (r1_int_1 \\ X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg(k6_numbers \neq X0) \wedge (r1_xxreal_0 \\ X0 k6_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (X0 \in k5_numbers)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_1 X1 X0) \Rightarrow ((r1_xxreal_0 X0 k6_numbers) \vee (r1_xxreal_0 X1 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 (k2_xcmplx_0 X1 X2)) \Leftrightarrow (r1_xxreal_0 (k6_xcmplx_0 X0 X1) X2)))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 X0) \Rightarrow (X0 = k6_numbers)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 k6_numbers X0 = k4_xcmplx_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg (r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 (k6_xcmplx_0 X0 np_1)))) \quad (11)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (12)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (13)$$

Assume the following.

$$k4_xcmplx_0 np_0 = np_0 \quad (14)$$

Assume the following.

$$\neg r1_xxreal_0 np_1 np_0 \quad (15)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (16)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (17)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 X0) \Leftrightarrow (r1_xxreal_0 X0 k1_xboole_0)) \quad (18)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (k19_binop_2 (k19_binop_2 X0) = X0) \quad (19)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v1_int_1 (k2_xcmplx_0 X0 X1)) \quad (21)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (m1_subset_1 (k19_binop_2 X0) k4_numbers) \quad (22)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Leftrightarrow (X0 \in k4_ordinal1) \quad (23)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow ((r1_xxreal_0 X0 X1) \vee (r1_xxreal_0 X1 X0)) \quad (24)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (25)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (26)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (v1_xreal_0 X0) \quad (27)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (28)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (29)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (30)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (31)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_numbers) \Rightarrow (v1_int_1 X0) \quad (32)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (((r1_xxreal_0 \\ (k6_xcmplx_0 np_1 X0) X1) \wedge ((r1_xxreal_0 X1 (k6_xcmplx_0 X0 np_1)) \wedge \\ (r1_int_1 X0 X1))) \Rightarrow (X1 = k1_xboole_0))) \end{aligned}$$