

t9_euler_1

(TMJ2Kkz2K9k2WJoPNfuK1GtkvY32zxJdeGc)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_int_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $np_0 : \iota$ be given. Let $k6_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\exists X2. \\ & (v1_int_1 X2) \wedge (\exists X3.(v1_int_1 X3) \wedge (k3_int_2 X0 X1 = k2_xcmplx_0 \\ & (k3_xcmplx_0 X2 X0) (k3_xcmplx_0 X3 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(r1_xxreal_0 X0 X1) \wedge (\neg(v2_xxreal_0 X1) \wedge (v2_xxreal_0 X0)))) \quad (3)$$

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.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 k6_numbers) \Rightarrow (\\ & \forall X1.(v7_ordinal1 X1) \Rightarrow (\exists X2.(v7_ordinal1 X2) \wedge (\exists X3. \\ & (v7_ordinal1 X3) \wedge ((X1 = k2_xcmplx_0 (k3_xcmplx_0 X0 X2) X3) \wedge (\neg \\ & r1_xxreal_0 X0 X3)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((\neg r1_xreal_0\ np_1\ X0)\Rightarrow(X0 = k6_numbers)) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow((\neg r1_xreal_0\ (k1_nat_1\ X1\ np_1)\ X0)\Leftrightarrow(r1_xreal_0\ X0\ X1))) \quad (7)$$

Assume the following.

$$((v2_xreal_0\ np_1)\wedge(m2_subset_1\ np_1\ k1_numbers\ k5_numbers))\wedge((m1_subset_1\ np_1\ k5_numbers)\wedge(m1_subset_1\ np_1\ k1_numbers)) \quad (8)$$

Assume the following.

$$(m2_subset_1\ np_0\ k1_numbers\ k5_numbers)\wedge((m1_subset_1\ np_0\ k5_numbers)\wedge(m1_subset_1\ np_0\ k1_numbers)) \quad (9)$$

Assume the following.

$$v1_xboole_0\ np_0 \quad (10)$$

Assume the following.

$$k2_xcmplx_0\ np_0\ np_1 = np_1 \quad (11)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(v7_ordinal1\ X1))\Rightarrow(k6_nat_d\ X0\ X1 = k3_int_2\ X0\ X1) \quad (13)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(m1_subset_1\ X1\ k5_numbers))\Rightarrow(k1_nat_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \quad (15)$$

Assume the following.

$$\exists X0.(v1_xboole_0\ X0)\wedge((v1_xcmplx_0\ X0)\wedge((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X0))) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1\ X0)\wedge(v1_int_1\ X1))\Rightarrow(v7_ordinal1\ (k3_int_2\ X0\ X1)) \quad (17)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((r1_int_2 X0 X1) \Leftrightarrow (k3_int_2 X0 X1 = np_1))) \quad (18)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota.v1_xboole_0 X0) \quad (19)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (20)$$

Assume the following.

$$\forall X0.((v1_xboole_0 X0) \wedge (v1_xxreal_0 X0)) \Rightarrow ((v1_xxreal_0 X0) \wedge ((\neg v2_xxreal_0 X0) \wedge (\neg v3_xxreal_0 X0))) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (23)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (24)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg \\ & (r1_int_2 X0 X1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (\neg (\exists X3. \\ & (v1_int_1 X3) \wedge (\exists X4.(v1_int_1 X4) \wedge ((X2 = k2_xcmplx_0 (k3_xcmplx_0 \\ & X3 X0) (k3_xcmplx_0 X4 X1)) \wedge (\neg r1_xxreal_0 X2 k6_numbers)))))) \wedge \\ & \forall X3.(v7_ordinal1 X3) \Rightarrow ((\exists X4.(v1_int_1 X4) \wedge (\exists X5. \\ & (v1_int_1 X5) \wedge ((X3 = k2_xcmplx_0 (k3_xcmplx_0 X4 X0) (k3_xcmplx_0 \\ & X5 X1)) \wedge (\neg r1_xxreal_0 X3 k6_numbers)))))) \Rightarrow (r1_xxreal_0 X2 X3)))))) \end{aligned}$$