

l23_euler_1

(TMM5HzAEvrwK1Qjq3yYkuVh4BzsZhikL4dn)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_int_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (k6_nat_d\ X0\ np_1 = np_1) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (k6_nat_d\ X0\ X0 = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (\neg(r1_xxreal_0\ X0\ np_2) \wedge ((X0 \neq k6_numbers) \wedge ((X0 \neq np_1) \wedge (X0 \neq np_2)))) \quad (3)$$

Assume the following.

$$((v2_xxreal_0\ np_2) \wedge (m2_subset_1\ np_2\ k1_numbers\ k5_numbers)) \wedge ((m1_subset_1\ np_2\ k5_numbers) \wedge (m1_subset_1\ np_2\ k1_numbers)) \quad (4)$$

Assume the following.

$$((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \quad (5)$$

Assume the following.

$$v1_xboole_0\ np_0 \quad (6)$$

Assume the following.

$$r1_xxreal_0\ np_1\ np_2 \quad (7)$$

Assume the following.

$$r1_xxreal_0 \ np_1 \ np_1 \tag{8}$$

Assume the following.

$$\neg r1_xxreal_0 \ np_1 \ np_0 \tag{9}$$

Assume the following.

$$r1_xxreal_0 \ np_0 \ np_2 \tag{10}$$

Assume the following.

$$\forall X0. \forall X1. ((v7_ordinal1 \ X0) \wedge (v7_ordinal1 \ X1)) \Rightarrow (k6_nat_d \ X0 \ X1 = k3_int_2 \ X0 \ X1) \tag{11}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{12}$$

Assume the following.

$$\forall X0. (v1_int_1 \ X0) \Rightarrow (\forall X1. (v1_int_1 \ X1) \Rightarrow ((r1_int_2 \ X0 \ X1) \Leftrightarrow (k3_int_2 \ X0 \ X1 = np_1))) \tag{13}$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \tag{14}$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (v7_ordinal1 \ X0) \tag{15}$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow (v1_int_1 \ X0) \tag{16}$$

Theorem 1

$$\forall X0. (X0 \in ReplSep \ (toSet \ (\lambda X1 : \iota. m1_subset_1 \ X1 \ k5_numbers)) \ (\lambda X1 : \iota. (r1_int_2 \ np_2 \ X1) \wedge ((r1_xxreal_0 \ np_1 \ X1) \wedge (r1_xxreal_0 \ X1 \ np_2)))) \ (\lambda X1 : \iota. X1) \Leftrightarrow (X0 = np_1)$$