

t32_euclid.8 (TMZgnYKJywpVvcSQKMY- wYZPDu6eg581JZa3)

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Let $k6_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k3_euclid.8 : \iota$ be given. Let $k1_euclid.8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k19_binop.2 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k9_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xreal.0 : \iota \Rightarrow o$ be given. Let $m2_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_finseq.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xreal.0 : \iota \Rightarrow o$ be given. Let $k24_valued.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xbool.0 : \iota$ be given. Let $k30_valued.1 : \iota \Rightarrow \iota$ 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 $v1_funct.1 : \iota \Rightarrow o$ be given. Let $v1_finseq.1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat.1 : \iota \Rightarrow o$ be given. Let $c7_xreal.0 : \iota$ be given. Let $c1_binop.2 : \iota$ be given. Let $v1_valued.0 : \iota \Rightarrow o$ be given. Let $v3_valued.0 : \iota \Rightarrow o$ be given. Let $v5_relat.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1_subset.1 X0 k1_numbers) \Rightarrow (k9_euclid np_3 k3_euclid.8 X0 = k1_euclid.8 k6_numbers X0 k6_numbers) \quad (1)$$

Assume the following.

$$\begin{aligned} & ((v2_xreal.0 np_3) \wedge (m2_subset.1 np_3 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset.1 np_3 k5_numbers) \wedge (m1_subset.1 np_3 k1_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2_xreal.0 np_1) \wedge (m2_subset.1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset.1 np_1 k5_numbers) \wedge (m1_subset.1 np_1 k1_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1.(m1_finseq.2 X1 X0) \Rightarrow (\forall X2.(m2_finseq.2 X2 X0 X1) \Leftrightarrow (m1_subset.1 X2 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1 X0)\wedge((m1_subset_1 X1 (k1_euclid X0))\wedge(v1_xreal_0 X2)))\Rightarrow(k9_euclid X0 X1 X2 = k24_valued_1 X1 X2) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_subset_1 X1 (k1_euclid X0)))\Rightarrow(k6_euclid X0 X1 = k30_valued_1 X1) \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(k19_binop_2 X0 = k4_xcmplx_0 X0) \quad (10)$$

Assume the following.

$$m1_subset_1 (k19_binop_2 np_1) k1_numbers \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0)\Rightarrow(\forall X2.(m2_finseq_2 X2 X0 X1)\Rightarrow(m2_finseq_1 X2 X0)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (14)$$

Assume the following.

$$m2_finseq_2 k3_euclid_8 k1_numbers (k1_euclid np_3) \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(m1_finseq_2\ (k1_euclid\ X0)\ k1_numbers) \quad (16)$$

Assume the following.

$$c7_xreal_0 = k6_numbers \quad (17)$$

Assume the following.

$$c1_binop_2 = k6_numbers \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_valued_0\ X0)))\Rightarrow \\ (k30_valued_1\ X0 = k24_valued_1\ X0\ (k4_xcmplx_0\ np_1)) \end{aligned} \quad (19)$$

Assume the following.

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

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge(v3_valued_0\ X0))\Rightarrow((v1_relat_1\ X0)\wedge(v1_valued_0\ X0)) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0)\Rightarrow(v5_relat_1\ X1\ X0) \quad (22)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge(v5_relat_1\ X0\ k1_numbers))\Rightarrow((v1_relat_1\ X0)\wedge(v3_valued_0\ X0)) \quad (23)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_int_1\ X0) \quad (24)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers)\Rightarrow(v1_xreal_0\ X0) \quad (25)$$

Theorem 1

$$k6_euclid\ np_3\ k3_euclid_8 = k1_euclid_8\ k6_numbers\ (k19_binop_2\ np_1)\ k6_numbers$$