t20_euclid_7 (TMUbHkpS8BLNYffWu1jAMQu1As9WsvUFG7z)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v6\_euclid\_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_euclid : \iota \Rightarrow \iota$ be given. Let $k5\_euclid : \iota \Rightarrow \iota$ 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 $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $m1\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (k9\_euclid\ X1\ (k5\_euclid\ X1)\ X0 = k5\_euclid\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m2\_finseq\_2\ X1\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow ((k7\_euclid\ X0\ (k9\_euclid\ X0\ X1\ k6\_numbers)\ X1 = X1) \wedge (k7\_euclid\ X0\ X1\ (k5\_euclid\ X0) = X1))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_2\ X1\ X0) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow (k6\_domain\_1\ X0\ X1 = k1\_tarski\ X1) \tag{4}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\neg v1\_xboole\_0\ (k1\_euclid\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow (m1\_subset\_1\ (k6\_domain\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(m2\_finseq\_2\ (k5\_euclid\ X0)\ k1\_numbers\ (k1\_euclid\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(m1\_finseq\_2\ (k1\_euclid\ X0)\ k1\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_euclid\ X0)))\Rightarrow((v6\_euclid\_7\ X1\ X0)\Leftrightarrow(\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0))\Rightarrow(\forall X3.(m2\_finseq\_2\ X3\ k1\_numbers\ (k1\_euclid\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ k1\_numbers)\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ k1\_numbers)\Rightarrow(((X2\in X1)\wedge(X3\in X1))\Rightarrow(k7\_euclid\ X0\ (k9\_euclid\ X0\ X2\ X4)\ (k9\_euclid\ X0\ X3\ X5)\in X1)))))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(X1=k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2\in X1)\Leftrightarrow(X2=X0)) \tag{10}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v6\_euclid\_7\ (k6\_domain\_1\ (k1\_euclid\ X0)\ (k5\_euclid\ X0))\ X0)$$