t31_e_siec (TMKCKBX6zprozn9tw6oa4pawJ86UC4GzCad)

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Let $v2\_e\_siec : \iota \Rightarrow o$ be given. Let $v3\_e\_siec : \iota \Rightarrow o$ be given. Let $l1\_e\_siec : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k14\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k4\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_e\_siec : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k5\_xboole\_0\ X0\ (k4\_xboole\_0\ X1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X2\ X1)) \Rightarrow (r1\_tarski\ (k2\_xboole\_0\ X0\ X2)\ X1) \tag{2}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0) \wedge ((v3\_e\_siec\ X0) \wedge (l1\_e\_siec\ X0))) \Rightarrow ((r1\_tarski\ (k13\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0))) \wedge (r1\_tarski\ (k14\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(k4\_relat\_1\ (k2\_xboole\_0\ X0\ X1) = k2\_xboole\_0\ (k4\_relat\_1\ X0)\ (k4\_relat\_1\ X1)) \wedge ((k4\_relat\_1\ (k3\_xboole\_0\ X0\ X1) = k3\_xboole\_0\ (k4\_relat\_1\ X0)\ (k4\_relat\_1\ X1)) \wedge (k4\_relat\_1\ (k6\_subset\_1\ X0\ X1) = k6\_subset\_1\ (k4\_relat\_1\ X0)\ (k4\_relat\_1\ X1))) \tag{4}$$

Assume the following.

$$\forall X0.r1\_tarski\ (k4\_relat\_1\ X0)\ (k2\_zfmisc\_1\ X0\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1\_tarski\ X0\ X1)\Rightarrow(r1\_tarski\ (k4\_xboole\_0\ X0\ X2)\ X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{7}$$

Assume the following.

$$\forall X0.(l1\_e\_siec\ X0)\Rightarrow((v2\_e\_siec\ X0)\Leftrightarrow((r1\_tarski\ (u1\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))\wedge((r1\_tarski\ (u2\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))\wedge((k3\_relat\_1\ (u1\_e\_siec\ X0)\ (u1\_e\_siec\ X0) = u1\_e\_siec\ X0)\wedge((k3\_relat\_1\ (u1\_e\_siec\ X0)\ (u2\_e\_siec\ X0) = u1\_e\_siec\ X0)\wedge((k3\_relat\_1\ (u2\_e\_siec\ X0)\ (u2\_e\_siec\ X0) = u2\_e\_siec\ X0)\wedge(k3\_relat\_1\ (u2\_e\_siec\ X0)\ (u1\_e\_siec\ X0) = u2\_e\_siec\ X0))))))) \tag{8}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0)\wedge((v3\_e\_siec\ X0)\wedge(l1\_e\_siec\ X0)))\Rightarrow(k17\_e\_siec\ X0 = k2\_xboole\_0\ (k4\_xboole\_0\ (k2\_xboole\_0\ (u1\_e\_siec\ X0)\ (u2\_e\_siec\ X0))\ (k4\_relat\_1\ (u1\_struct\_0\ X0)))\ (k4\_relat\_1\ (k4\_xboole\_0\ (u1\_struct\_0\ X0)\ (k10\_xtuple\_0\ (u1\_e\_siec\ X0))))) \tag{9}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0)\wedge((v3\_e\_siec\ X0)\wedge(l1\_e\_siec\ X0)))\Rightarrow(k12\_e\_siec\ X0 = u1\_struct\_0\ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.((v2\_e\_siec\ X0)\wedge((v3\_e\_siec\ X0)\wedge(l1\_e\_siec\ X0)))\Rightarrow((r1\_tarski\ (k17\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0)))\wedge(r1\_tarski\ (k14\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0))))$$