

t1\_e\_siec  
(TMHLih9Bofe3gYMADz7emhdeAoEkSXFzizu)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v2\_e\_siec : \iota \Rightarrow o$  be given. Let  $g1\_e\_siec : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_e\_siec : \iota \Rightarrow o$  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. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X1) \wedge (v1\_relat\_1 \\ X2)) \Rightarrow (\forall X3. \forall X4. \forall X5. (g1\_e\_siec X0 X1 X2 = g1\_e\_siec \\ X3 X4 X5) \Rightarrow ((X0 = X3) \wedge ((X1 = X4) \wedge (X2 = X5)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X1) \wedge (v1\_relat\_1 \\ X2)) \Rightarrow ((v1\_e\_siec (g1\_e\_siec X0 X1 X2)) \wedge (l1\_e\_siec (g1\_e\_siec \\ X0 X1 X2))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_e\_siec X0) \Rightarrow ((v3\_e\_siec X0) \Leftrightarrow ((k3\_relat\_1 (u1\_e\_siec \\ X0) (k4\_xboole\_0 (u1\_e\_siec X0) (k4\_relat\_1 (u1\_struct\_0 X0))) = \\ k1\_xboole\_0) \wedge (k3\_relat\_1 (u2\_e\_siec X0) (k4\_xboole\_0 (u2\_e\_siec \\ X0) (k4\_relat\_1 (u1\_struct\_0 X0))) = k1\_xboole\_0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_e\_siec X0) \Rightarrow ((v2\_e\_siec X0) \Leftrightarrow ((r1\_tarski (u1\_e\_siec \\ X0) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge ((r1\_tarski \\ (u2\_e\_siec X0) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge \\ ((k3\_relat\_1 (u1\_e\_siec X0) (u1\_e\_siec X0) = u1\_e\_siec X0) \wedge ((k3\_relat\_1 \\ (u1\_e\_siec X0) (u2\_e\_siec X0) = u1\_e\_siec X0) \wedge ((k3\_relat\_1 (u2\_e\_siec \\ X0) (u2\_e\_siec X0) = u2\_e\_siec X0) \wedge (k3\_relat\_1 (u2\_e\_siec X0) ( \\ u1\_e\_siec X0) = u2\_e\_siec X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1\_e\_siec\ X0) \Rightarrow ((v1\_e\_siec\ X0) \Rightarrow (X0 = g1\_e\_siec\ (u1\_struct\_0\ X0)\ (u1\_e\_siec\ X0)\ (u2\_e\_siec\ X0))) \quad (5)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow (\forall X2.(v1\_relat\_1\ X2) \Rightarrow (((v2\_e\_siec\ (g1\_e\_siec\ X0\ X1\ X2)) \wedge ((v3\_e\_siec\ (g1\_e\_siec\ X0\ X1\ X2)) \wedge (l1\_e\_siec\ (g1\_e\_siec\ X0\ X1\ X2)))) \Leftrightarrow ((r1\_tarski\ X1\ (k2\_zfmisc\_1\ X0\ X0)) \wedge (r1\_tarski\ X2\ (k2\_zfmisc\_1\ X0\ X0)) \wedge ((k3\_relat\_1\ X1\ X1 = X1) \wedge ((k3\_relat\_1\ X1\ X2 = X1) \wedge ((k3\_relat\_1\ X2\ X2 = X2) \wedge ((k3\_relat\_1\ X2\ X1 = X2) \wedge ((k3\_relat\_1\ X1\ (k4\_xboole\_0\ X1\ (k4\_relat\_1\ X0)) = k1\_xboole\_0) \wedge (k3\_relat\_1\ X2\ (k4\_xboole\_0\ X2\ (k4\_relat\_1\ X0)) = k1\_xboole\_0)))))))))) \end{aligned}$$