t36_sysrel (TMJqscwAaqi4gqgnn3gjaYjs3UNRTcxpoHm)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_sysrel : \iota \Rightarrow \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((((r1\_tarski\ (k4\_relat\_1\ X0)\ X1) \wedge (k3\_relat\_1\ (k4\_relat\_1\ X0)\ (k6\_subset\_1\ X1\ (k4\_relat\_1\ X0)) = k1\_xboole\_0)) \Rightarrow (k5\_relat\_1\ X1\ X0 = k4\_relat\_1\ X0)) \wedge (((r1\_tarski\ (k4\_relat\_1\ X0)\ X1) \wedge (k3\_relat\_1\ (k6\_subset\_1\ X1\ (k4\_relat\_1\ X0))\ (k4\_relat\_1\ X0) = k1\_xboole\_0)) \Rightarrow (k6\_relat\_1\ X0\ X1 = k4\_relat\_1\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow ((r1\_tarski\ (k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0)))\ X0) \wedge (r1\_tarski\ (k4\_relat\_1\ (k10\_xtuple\_0\ (k1\_sysrel\ X0)))\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (k9\_xtuple\_0\ (k1\_sysrel\ X0) = k10\_xtuple\_0\ (k1\_sysrel\ X0)) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (((k3\_relat\_1\ (k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0)))\ (k6\_subset\_1\ X0\ (k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0))))) = k1\_xboole\_0) \Rightarrow ((k5\_relat\_1\ X0\ (k9\_xtuple\_0\ (k1\_sysrel\ X0)) = k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0))) \wedge (k5\_relat\_1\ X0\ (k10\_xtuple\_0\ (k1\_sysrel\ X0)) = k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0)))))) \wedge ((k3\_relat\_1\ (k6\_subset\_1\ X0\ (k4\_relat\_1\ (k10\_xtuple\_0\ (k1\_sysrel\ X0))))\ (k4\_relat\_1\ (k10\_xtuple\_0\ (k1\_sysrel\ X0))) = k1\_xboole\_0) \Rightarrow ((k6\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0))\ X0 = k4\_relat\_1\ (k9\_xtuple\_0\ (k1\_sysrel\ X0))) \wedge (k6\_relat\_1\ (k10\_xtuple\_0\ (k1\_sysrel\ X0))\ X0 = k4\_relat\_1\ (k10\_xtuple\_0\ (k1\_sysrel\ X0))))))$$