t20_ens_1 (TMKQT1LyzP4tKwWHBxzX59yfEwXUXjxsRLC)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_ens\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_ens\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_ens\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ens\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k2\_ens\_1\ X0)) \Rightarrow ((X3 \in k7\_ens\_1\ X0\ X1\ X2) \Leftrightarrow ((k3\_ens\_1\ X0\ X3 = X1) \wedge (k4\_ens\_1\ X0\ X3 = X2))))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k2\_ens\_1\ X0)) \Rightarrow ((k9\_xtuple\_0\ (k2\_xtuple\_0\ X1) = k3\_ens\_1\ X0\ X1) \wedge (r1\_tarski\ (k10\_xtuple\_0\ (k2\_xtuple\_0\ X1))\ (k4\_ens\_1\ X0\ X1)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ (k2\_ens\_1\ X0))) \Rightarrow ((v1\_relat\_1\ (k2\_xtuple\_0\ X1)) \wedge (v1\_funct\_1\ (k2\_xtuple\_0\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k1\_funct\_2\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow (\exists X4.((v1\_relat\_1\ X4) \wedge (v1\_funct\_1\ X4)) \wedge ((X3 = X4) \wedge ((k9\_xtuple\_0\ X4 = X0) \wedge (r1\_tarski\ (k10\_xtuple\_0\ X4)\ X1)))))) \tag{4}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k2\_ens\_1\ X0)) \Rightarrow ((X3 \in k7\_ens\_1\ X0\ X1\ X2) \Rightarrow (k2\_xtuple\_0\ X3 \in k1\_funct\_2\ X1\ X2))))))$$