t17_laplace (TMWhR6BWCUdqg6RMsGsrnEv5agKsARbWxJ5)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_matrix\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_laplace : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_matrix\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4\_tarski\ X0\ X1 \in k2\_zfmisc\_1\ X2\ X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.(m1\_matrix\_1\ X3\ X2\ X0\ X1) \Rightarrow ((k3\_finseq\_1\ X3 = X0) \wedge (k2\_matrix\_1\ X3 = k2\_zfmisc\_1\ (k2\_finseq\_1\ X0)\ (k2\_finseq\_1\ (k1\_matrix\_1\ X3)))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (\forall X3.(\neg v1\_xboole\_0\ X3) \Rightarrow (\forall X4.(m1\_matrix\_1\ X4\ X3\ X1\ X2) \Rightarrow (\forall X5.(m2\_finseq\_1\ X5\ X3) \Rightarrow (\forall X6.(m1\_matrix\_1\ X6\ X3\ X1\ X2) \Rightarrow (((k3\_finseq\_1\ X5 = k3\_finseq\_1\ X4) \Rightarrow ((X6 = k3\_laplace\ X0\ X1\ X2\ X3\ X4\ X5) \Leftrightarrow ((k3\_finseq\_1\ X6 = k3\_finseq\_1\ X4) \wedge ((k1\_matrix\_1\ X6 = k1\_matrix\_1\ X4) \wedge (\forall X7.(v7\_ordinal1\ X7) \Rightarrow (\forall X8.(v7\_ordinal1\ X8) \Rightarrow ((k4\_tarski\ X7\ X8 \in k2\_matrix\_1\ X4) \Rightarrow (((X8 \neq X0) \Rightarrow (k3\_matrix\_1\ X3\ X6\ X7\ X8 = k3\_matrix\_1\ X3\ X4\ X7\ X8)) \wedge ((X8 = X0) \Rightarrow (k3\_matrix\_1\ X3\ X6\ X7\ X0 = k1\_funct\_1\ X5\ X7)))))))))) \wedge ((k3\_finseq\_1\ X5 \neq k3\_finseq\_1\ X4) \Rightarrow ((X6 = k3\_laplace\ X0\ X1\ X2\ X3\ X4\ X5) \Leftrightarrow (X6 = X4))))))))))) \tag{3}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(\forall X2.$$
$$(v7\_ordinal1\ X2)\Rightarrow(\forall X3.(\neg v1\_xboole\_0\ X3)\Rightarrow(\forall X4.$$
$$(m1\_matrix\_1\ X4\ X3\ X0\ X1)\Rightarrow(\forall X5.(m2\_finseq\_1\ X5\ X3)\Rightarrow((\neg X2 \in$$
$$k2\_finseq\_1\ (k1\_matrix\_1\ X4))\Rightarrow(k3\_laplace\ X2\ X0\ X1\ X3\ X4\ X5 = X4)))))))$$