

t68_bvfunc14

(TMW_nW5GKJLn_f73LEdSbmX1CYPJxcshXkUjs)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_bvfunc_2 : \iota \Rightarrow \iota$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_bvfunc_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_partit1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & \forall X6. \forall X7. \forall X8. k7_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6 \\ & X7\ X8 = k2_xboole_0\ (k2_tarski\ X0\ X1)\ (k5_enumset1\ X2\ X3\ X4\ X5\ X6\ X7 \\ & \quad X8) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0\ X0) \Rightarrow (\forall X1. (m1_subset_1\ X1\ (k1_zfmisc_1 \\ & \quad (k1_bvfunc_2\ X0))) \Rightarrow (\forall X2. (m1_eqrel_1\ X2\ X0) \Rightarrow (\forall X3. \\ & \quad (m1_eqrel_1\ X3\ X0) \Rightarrow (\forall X4. (m1_eqrel_1\ X4\ X0) \Rightarrow (\forall X5. \\ & \quad (m1_eqrel_1\ X5\ X0) \Rightarrow (\forall X6. (m1_eqrel_1\ X6\ X0) \Rightarrow (\forall X7. \\ & \quad (m1_eqrel_1\ X7\ X0) \Rightarrow (\forall X8. (m1_eqrel_1\ X8\ X0) \Rightarrow (\forall X9. \\ & \quad (m1_eqrel_1\ X9\ X0) \Rightarrow (\forall X10. (m1_eqrel_1\ X10\ X0) \Rightarrow ((X1 = k7_enumset1 \\ & \quad X2\ X3\ X4\ X5\ X6\ X7\ X8\ X9\ X10) \Rightarrow ((X2 = X3) \vee ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee \\ & \quad ((X2 = X7) \vee ((X2 = X8) \vee ((X2 = X9) \vee ((X2 = X10) \vee ((X3 = X4) \vee ((X3 = X5) \vee \\ & \quad ((X3 = X6) \vee ((X3 = X7) \vee ((X3 = X8) \vee ((X3 = X9) \vee ((X3 = X10) \vee ((X4 = X5) \vee \\ & \quad ((X4 = X6) \vee ((X4 = X7) \vee ((X4 = X8) \vee ((X4 = X9) \vee ((X4 = X10) \vee ((X5 = X6) \vee \\ & \quad ((X5 = X7) \vee ((X5 = X8) \vee ((X5 = X9) \vee ((X5 = X10) \vee ((X6 = X7) \vee ((X6 = X8) \vee \\ & \quad ((X6 = X9) \vee ((X6 = X10) \vee ((X7 = X8) \vee ((X7 = X9) \vee ((X7 = X10) \vee ((X8 = X9) \vee \\ & \quad ((X8 = X10) \vee ((X9 = X10) \vee (k5_bvfunc_2\ X0\ X2\ X1 = k2_partit1\ X0\ (k2_partit1 \\ & \quad X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (\\ & \quad k2_partit1\ X0\ X3\ X4)\ X5)\ X6)\ X7)\ X8)\ X9)\ X10))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski\ X0\ X1 = k2_tarski\ X1\ X0 \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\
& \quad (k1_bvfunc_2 X0))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow (\forall X3. \\
& \quad (m1_eqrel_1 X3 X0) \Rightarrow (\forall X4. (m1_eqrel_1 X4 X0) \Rightarrow (\forall X5. \\
& \quad (m1_eqrel_1 X5 X0) \Rightarrow (\forall X6. (m1_eqrel_1 X6 X0) \Rightarrow (\forall X7. \\
& \quad (m1_eqrel_1 X7 X0) \Rightarrow (\forall X8. (m1_eqrel_1 X8 X0) \Rightarrow (\forall X9. \\
& \quad (m1_eqrel_1 X9 X0) \Rightarrow (\forall X10. (m1_eqrel_1 X10 X0) \Rightarrow ((X1 = k7_enumset1 \\
X2 X3 X4 X5 X6 X7 X8 X9 X10) \Rightarrow ((X2 = X3) \vee ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee \\
((X2 = X7) \vee ((X2 = X8) \vee ((X2 = X9) \vee ((X2 = X10) \vee ((X3 = X4) \vee ((X3 = X5) \vee \\
((X3 = X6) \vee ((X3 = X7) \vee ((X3 = X8) \vee ((X3 = X9) \vee ((X3 = X10) \vee ((X4 = X5) \vee \\
((X4 = X6) \vee ((X4 = X7) \vee ((X4 = X8) \vee ((X4 = X9) \vee ((X4 = X10) \vee ((X5 = X6) \vee \\
((X5 = X7) \vee ((X5 = X8) \vee ((X5 = X9) \vee ((X5 = X10) \vee ((X6 = X7) \vee ((X6 = X8) \vee \\
((X6 = X9) \vee ((X6 = X10) \vee ((X7 = X8) \vee ((X7 = X9) \vee ((X7 = X10) \vee ((X8 = X9) \vee \\
((X8 = X10) \vee ((X9 = X10) \vee (k5_bvfunc_2 X0 X3 X1 = k2_partit1 X0 (k2_partit1 \\
X0 (k2_partit1 X0 (k2_partit1 X0 (k2_partit1 X0 (k2_partit1 X0 (\\
k2_partit1 X0 X2 X4) X5) X6) X7) X8) X9) X10))))))))))))))))))))))))))))))))))))))
\end{aligned}$$