

## t35\_bvfunc14

(TMZzNMN1xzSg2zEScwzJSdgDJiLKqBT69sS)

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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  $k4\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_bvfunc\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_partit1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k1\_enumset1 X0 X1 X2 = k2\_xboole\_0 (k2\_tarski X0 X1) (k1\_tarski X2) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (k1\_bvfunc\_2 X0))) \Rightarrow (\forall X2. (m1\_eqrel\_1 X2 X0) \Rightarrow (\forall X3. \\ (m1\_eqrel\_1 X3 X0) \Rightarrow (\forall X4. (m1\_eqrel\_1 X4 X0) \Rightarrow (\forall X5. \\ (m1\_eqrel\_1 X5 X0) \Rightarrow (\forall X6. (m1\_eqrel\_1 X6 X0) \Rightarrow (\forall X7. \\ (m1\_eqrel\_1 X7 X0) \Rightarrow ((X1 = k4\_enumset1 X2 X3 X4 X5 X6 X7) \Rightarrow ((X2 = X3) \vee \\ ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee ((X2 = X7) \vee ((X3 = X4) \vee ((X3 = X5) \vee \\ (X3 = X6) \vee ((X3 = X7) \vee ((X4 = X5) \vee ((X4 = X6) \vee ((X4 = X7) \vee ((X5 = X6) \vee (( \\ X5 = X7) \vee ((X6 = X7) \vee (k5\_bvfunc\_2 X0 X5 X1 = k2\_partit1 X0 (k2\_partit1 \\ X0 (k2\_partit1 X0 (k2\_partit1 X0 X2 X3) X4) X6) X7))))))))))))))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ k4\_enumset1 X0 X1 X2 X3 X4 X5 = k2\_xboole\_0 (k1\_enumset1 X0 X1 X2) ( \\ k1\_enumset1 X3 X4 X5) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k2\_tarski X0 X1 = k2\_tarski X1 X0 \quad (4)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & \quad (k1\_bfunc\_2 X0))) \Rightarrow (\forall X2.(m1\_eqrel\_1 X2 X0) \Rightarrow (\forall X3. \\ & \quad (m1\_eqrel\_1 X3 X0) \Rightarrow (\forall X4.(m1\_eqrel\_1 X4 X0) \Rightarrow (\forall X5. \\ & \quad (m1\_eqrel\_1 X5 X0) \Rightarrow (\forall X6.(m1\_eqrel\_1 X6 X0) \Rightarrow (\forall X7. \\ (m1\_eqrel\_1 X7 X0) \Rightarrow ((X1 = k4\_enumset1 X2 X3 X4 X5 X6 X7) \Rightarrow ((X2 = X3) \vee \\ ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee ((X2 = X7) \vee ((X3 = X4) \vee ((X3 = X5) \vee ( \\ (X3 = X6) \vee ((X3 = X7) \vee ((X4 = X5) \vee ((X4 = X6) \vee ((X4 = X7) \vee ((X5 = X6) \vee ( \\ X5 = X7) \vee ((X6 = X7) \vee (k5\_bfunc\_2 X0 X6 X1 = k2\_partit1 X0 (k2\_partit1 \\ X0 (k2\_partit1 X0 (k2\_partit1 X0 X2 X3) X4) X5) X7))))))))))))))))))))) \end{aligned}$$