

# t67\_memstr\_0 (TMYE<sub>p</sub>EBZ<sub>n</sub>ExbVRb- nqx3riw9nAhLJPPG5EiK)

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Let  $v1\_setfam\_1 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v5\_funct\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_nat\_d : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. 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  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (\forall X1.((v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \Rightarrow (r1\_tarski X0 (k1\_funct\_4 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (2)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (3)$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (m1\_subset\_1 (k7\_nat\_d X0 X1) k5\_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1\_setfam\_1 X0)\wedge(((\neg v2\_struct\_0 \\ & X1)\wedge((v2\_memstr\_0 X1 X0)\wedge((v3\_memstr\_0 X1 X0)\wedge(l1\_memstr\_0 X1 \\ & X0))))\wedge(v7\_ordinal1 X2)))\Rightarrow((v1\_relat\_1 (k7\_memstr\_0 X0 X1 X2))\wedge \\ & ((v4\_relat\_1 (k7\_memstr\_0 X0 X1 X2) (u1\_struct\_0 X1))\wedge((v1\_funct\_1 \\ & (k7\_memstr\_0 X0 X1 X2))\wedge(v5\_funct\_1 (k7\_memstr\_0 X0 X1 X2) (k2\_memstr\_0 \\ & X0 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1\_setfam\_1 X0)\wedge(((\neg v2\_struct\_0 \\ & X1)\wedge((v2\_memstr\_0 X1 X0)\wedge((v3\_memstr\_0 X1 X0)\wedge(l1\_memstr\_0 X1 \\ & X0))))\wedge((v1\_relat\_1 X2)\wedge((v4\_relat\_1 X2 (u1\_struct\_0 X1))\wedge( \\ & (v1\_funct\_1 X2)\wedge(v5\_funct\_1 X2 (k2\_memstr\_0 X0 X1))))))\Rightarrow(m2\_subset\_1 \\ & (k5\_memstr\_0 X0 X1 X2) k1\_numbers k5\_numbers) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1\_setfam\_1 X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0 X1)\wedge \\ & ((v2\_memstr\_0 X1 X0)\wedge(v3\_memstr\_0 X1 X0)\wedge(l1\_memstr\_0 X1 X0))))\Rightarrow \\ & (\forall X2.((v1\_relat\_1 X2)\wedge((v4\_relat\_1 X2 (u1\_struct\_0 X1))\wedge \\ & ((v1\_funct\_1 X2)\wedge(v5\_funct\_1 X2 (k2\_memstr\_0 X0 X1))))))\Rightarrow(\forall X3. \\ & (v7\_ordinal1 X3)\Rightarrow(k10\_memstr\_0 X0 X1 X2 X3 = k1\_funct\_4 X2 (k7\_memstr\_0 \\ & X0 X1 (k7\_nat\_d (k5\_memstr\_0 X0 X1 X2) X3)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))\Rightarrow(v1\_xboole\_0 X1)) \quad (11)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_setfam\_1 X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0 X1)\wedge \\ & ((v2\_memstr\_0 X1 X0)\wedge((v3\_memstr\_0 X1 X0)\wedge(l1\_memstr\_0 X1 X0))))\Rightarrow \\ & (\forall X2.((v1\_relat\_1 X2)\wedge((v4\_relat\_1 X2 (u1\_struct\_0 X1))\wedge \\ & ((v1\_funct\_1 X2)\wedge(v5\_funct\_1 X2 (k2\_memstr\_0 X0 X1))))))\Rightarrow(\forall X3. \\ & (v7\_ordinal1 X3)\Rightarrow(r1\_tarski (k7\_memstr\_0 X0 X1 (k7\_nat\_d (k5\_memstr\_0 \\ & X0 X1 X2) X3)) (k10\_memstr\_0 X0 X1 X2 X3)))) \end{aligned}$$