

# t4\_ospace (TMSjgBR- MXQaKp3v4d9Las7DFobBV1kKXdbV)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_ospace : \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k2\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v33\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $v5\_group\_1 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v5\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$k2\_struct\_0 \ k2\_ospace = k2\_tarski \ k1\_xboole\_0 \ np\_1 \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. k2\_tarski \ X0 \ X1 = k2\_xboole\_0 \ (k1\_tarski \ X0) \ (k1\_tarski \ X1) \tag{2}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 \ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{4}$$

Assume the following.

$$\forall X0. (l6\_algstr\_0 \ X0) \Rightarrow ((l2\_algstr\_0 \ X0) \wedge (l5\_algstr\_0 \ X0)) \tag{5}$$

Assume the following.

$$\forall X0. (l2\_struct\_0 \ X0) \Rightarrow (l1\_struct\_0 \ X0) \tag{6}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0 X0) \Rightarrow ((l2\_struct\_0 X0) \wedge (l1\_algstr\_0 X0)) \quad (7)$$

Assume the following.

$$\begin{aligned} & (\neg v2\_struct\_0 k2\_bspace) \wedge ((\neg v6\_struct\_0 k2\_bspace) \wedge ((v13\_algstr\_0 \\ & k2\_bspace) \wedge ((v33\_algstr\_0 k2\_bspace) \wedge ((v3\_group\_1 k2\_bspace) \wedge \\ & ((v5\_group\_1 k2\_bspace) \wedge ((v4\_vectsp\_1 k2\_bspace) \wedge ((v5\_vectsp\_1 \\ & k2\_bspace) \wedge ((v2\_rlvect\_1 k2\_bspace) \wedge ((v3\_rlvect\_1 k2\_bspace) \wedge \\ & ((v4\_rlvect\_1 k2\_bspace) \wedge (l6\_algstr\_0 k2\_bspace)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow (k2\_struct\_0 X0 = u1\_struct\_0 X0) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \Rightarrow ((m1\_subset\_1 X1 X0) \Leftrightarrow \\ (X1 \in X0))) \wedge ((v1\_xboole\_0 X0) \Rightarrow ((m1\_subset\_1 X1 X0) \Leftrightarrow (v1\_xboole\_0 \\ X1))) \end{aligned} \quad (11)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 k2\_bspace)) \Rightarrow ((X0 = k1\_xboole\_0) \vee (X0 = np\_1))$$