t40_bspace (TMXRnAQwrkJshxETrEebSroAR-jUuWPd7RNA)

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Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $m1\_vectsp\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_bspace : \iota \Rightarrow \iota$ be given. Let $k2\_bspace : \iota$ be given. Let $k7\_bspace : \iota \Rightarrow \iota$ be given. Let $k1\_vectsp\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_vectsp\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. 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 $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v8\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v11\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_finset\_1\ X0) \Rightarrow (k1\_vectsp\_7\ k2\_bspace\ (k7\_bspace\ X0)\ (k9\_bspace\ X0) = k7\_bspace\ X0) \tag{1}$$

Assume the following.

$$\forall X0.v1\_vectsp\_7\ (k9\_bspace\ X0)\ k2\_bspace\ (k7\_bspace\ X0) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((\neg v6\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v33\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge ((v5\_group\_1\ X0) \wedge ((v4\_vectsp\_1\ X0) \wedge ((v5\_vectsp\_1\ X0) \wedge (l6\_algstr\_0\ X0))))))))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v8\_vectsp\_1\ X1\ X0) \wedge ((v9\_vectsp\_1\ X1\ X0) \wedge ((v10\_vectsp\_1\ X1\ X0) \wedge ((v11\_vectsp\_1\ X1\ X0) \wedge (l1\_vectsp\_1\ X1\ X0))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow ((v1\_vectsp\_7\ X2\ X0\ X1) \Rightarrow (m1\_vectsp\_7\ X2\ X0\ (k1\_vectsp\_7\ X0\ X1\ X2)))))) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v2\_struct\_0\ (k7\_bspace\ X0))\wedge((v13\_algstr\_0\ (k7\_bspace\ X0))\wedge((v8\_vectsp\_1\ (k7\_bspace\ X0)\ k2\_bspace)\wedge((v9\_vectsp\_1\ (k7\_bspace\ X0)\ k2\_bspace)\wedge((v10\_vectsp\_1\ (k7\_bspace\ X0)\ k2\_bspace)\wedge((v11\_vectsp\_1\ (k7\_bspace\ X0)\ k2\_bspace)\wedge((v2\_rlvect\_1\ (k7\_bspace\ X0))\wedge((v3\_rlvect\_1\ (k7\_bspace\ X0))\wedge(v4\_rlvect\_1\ (k7\_bspace\ X0))))))))) \tag{4}$$

Assume the following.

$$\forall X0.m1\_subset\_1\ (k9\_bspace\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k7\_bspace\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.(\neg v2\_struct\_0\ (k7\_bspace\ X0))\wedge(l1\_vectsp\_1\ (k7\_bspace\ X0)\ k2\_bspace) \tag{6}$$

Assume the following.

$$(\neg v2\_struct\_0\ k2\_bspace)\wedge((\neg v6\_struct\_0\ k2\_bspace)\wedge((v13\_algstr\_0\ k2\_bspace)\wedge((v33\_algstr\_0\ k2\_bspace)\wedge((v3\_group\_1\ k2\_bspace)\wedge((v5\_group\_1\ k2\_bspace)\wedge((v4\_vectsp\_1\ k2\_bspace)\wedge((v5\_vectsp\_1\ k2\_bspace)\wedge((v2\_rlvect\_1\ k2\_bspace)\wedge((v3\_rlvect\_1\ k2\_bspace)\wedge((v4\_rlvect\_1\ k2\_bspace)\wedge(l6\_algstr\_0\ k2\_bspace)))))))))) \tag{7}$$

Theorem 1

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow(m1\_vectsp\_7\ (k9\_bspace\ X0)\ k2\_bspace\ (k7\_bspace\ X0))$$