

l28\_algstr\_1  
(TMWSh88FF23zmtkWg1sztttrvcBNfjTqukk9)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l4\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l4\_algstr\_0 X0)) \Rightarrow (\forall X1. \\
& (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\
& (u1\_struct\_0 X0)) \Rightarrow ((\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 \\
& X0)) \Rightarrow (k6\_algstr\_0 X0 X3 (k5\_struct\_0 X0) = X3)) \wedge ((\forall X3.( \\
& m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\exists X4.(m1\_subset\_1 X4 \\
& (u1\_struct\_0 X0)) \wedge (k6\_algstr\_0 X0 X3 X4 = k5\_struct\_0 X0)))) \wedge (( \\
& \forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 \\
& X4 (u1\_struct\_0 X0)) \Rightarrow (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 \\
& X0)) \Rightarrow (k6\_algstr\_0 X0 (k6\_algstr\_0 X0 X3 X4) X5 = k6\_algstr\_0 X0 X3 \\
& (k6\_algstr\_0 X0 X4 X5)))))) \wedge (k6\_algstr\_0 X0 X1 X2 = k5\_struct\_0 X0)))) \Rightarrow \\
& (k6\_algstr\_0 X0 X2 X1 = k5\_struct\_0 X0)))
\end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l4\_algstr\_0 X0)) \Rightarrow (\forall X1. \\
& (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow ((\forall X2.(m1\_subset\_1 \\
& X2 (u1\_struct\_0 X0)) \Rightarrow (k6\_algstr\_0 X0 X2 (k5\_struct\_0 X0) = X2)) \wedge \\
& ((\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\exists X3.( \\
& m1\_subset\_1 X3 (u1\_struct\_0 X0)) \wedge (k6\_algstr\_0 X0 X2 X3 = k5\_struct\_0 \\
& X0))) \wedge (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 \\
& (u1\_struct\_0 X0)) \Rightarrow (k6\_algstr\_0 X0 (k6\_algstr\_0 X0 X2 X3) X4 = k6\_algstr\_0 \\
& X0 X2 (k6\_algstr\_0 X0 X3 X4)))))) \Rightarrow (k6\_algstr\_0 X0 (k5\_struct\_0 \\
& X0) X1 = k6\_algstr\_0 X0 X1 (k5\_struct\_0 X0))))
\end{aligned}$$