

# t45\_genealg1

## (TMRUVJ666RvdTuRrgZv5iNffBp6SSRVDeMb)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v2\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $m1\_genealg1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k11\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k10\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1 X4 k5\_numbers) \Rightarrow \\
& \quad (\forall X5.((\neg v1\_xboole\_0 X5) \wedge ((v1\_relat\_1 X5) \wedge ((v2\_relat\_1 \\
& \quad X5) \wedge ((v1\_funct\_1 X5) \wedge (v1\_finseq\_1 X5)))))) \Rightarrow (\forall X6.(m1\_genealg1 \\
& \quad X6 X5) \Rightarrow (\forall X7.(m1\_genealg1 X7 X5) \Rightarrow ((k11\_genealg1 X5 X6 X7 \\
& k6\_numbers X0 X1 X2 X3 = k10\_genealg1 X5 X7 X6 X0 X1 X2 X3) \wedge ((k11\_genealg1 \\
& \quad X5 X6 X7 X4 k6\_numbers X1 X2 X3 = k10\_genealg1 X5 X7 X6 X4 X1 X2 X3) \wedge (( \\
& \quad k11\_genealg1 X5 X6 X7 X4 X0 k6\_numbers X2 X3 = k10\_genealg1 X5 X7 X6 \\
& \quad X4 X0 X2 X3) \wedge ((k11\_genealg1 X5 X6 X7 X4 X0 X1 k6\_numbers X3 = k10\_genealg1 \\
& \quad X5 X7 X6 X4 X0 X1 X3) \wedge ((k11\_genealg1 X5 X6 X7 X4 X0 X1 X2 k6\_numbers = k10\_genealg1 \\
& \quad X5 X7 X6 X4 X0 X1 X2))))))))))))) \\
& \hspace{15em} (1)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v1\_xboole\_0 X0) \wedge ((v1\_relat\_1 X0) \wedge ((v2\_relat\_1 \\
& \quad X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0)))))) \Rightarrow (\forall X1.(m1\_genealg1 \\
& X1 X0) \Rightarrow (\forall X2.(m1\_genealg1 X2 X0) \Rightarrow (k10\_genealg1 X0 X1 X2 k6\_numbers \\
& \quad k6\_numbers k6\_numbers k6\_numbers = X1))) \\
& \hspace{15em} (2)
\end{aligned}$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \hspace{15em} (3)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \hspace{15em} (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge ((v1\_relat\_1 X0) \wedge ((v2\_relat\_1 \\ & X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0)))))) \Rightarrow (\forall X1. (m1\_genealg1 \\ & X1 X0) \Rightarrow (\forall X2. (m1\_genealg1 X2 X0) \Rightarrow (k11\_genealg1 X0 X1 X2 k6\_numbers \\ & k6\_numbers k6\_numbers k6\_numbers k6\_numbers = X2))) \end{aligned}$$