

t30\_genealg1  
(TMTc1LriFP96pREhS9ScU8mSCnuVPbQ6vN6)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. 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  $k10\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k8\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4. ((\neg v1\_xboole\_0 X4) \wedge \\
& ((v1\_relat\_1 X4) \wedge ((v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X4) \Rightarrow ((k10\_genealg1 X4 X5 X6 k6\_numbers X0 X1 X2 = k9\_genealg1 X4 \\
& X6 X5 X0 X1 X2) \wedge ((k10\_genealg1 X4 X5 X6 X3 k6\_numbers X1 X2 = k9\_genealg1 \\
& X4 X6 X5 X3 X1 X2) \wedge ((k10\_genealg1 X4 X5 X6 X3 X0 k6\_numbers X2 = k9\_genealg1 \\
& X4 X6 X5 X3 X0 X2) \wedge (k10\_genealg1 X4 X5 X6 X3 X0 X1 k6\_numbers = k9\_genealg1 \\
& X4 X6 X5 X3 X0 X1))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow ((k9\_genealg1 X3 X4 X5 k6\_numbers X0 X1 = k8\_genealg1 \\
& X3 X5 X4 X0 X1) \wedge ((k9\_genealg1 X3 X4 X5 X2 k6\_numbers X1 = k8\_genealg1 \\
& X3 X5 X4 X2 X1) \wedge (k9\_genealg1 X3 X4 X5 X2 X0 k6\_numbers = k8\_genealg1 \\
& X3 X5 X4 X2 X0))))))
\end{aligned} \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (4)$$

Assume the following.

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

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\ & (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\ & ((v1\_relat\_1 X4) \wedge ((v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\ & X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\ & X6 X4) \Rightarrow ((k10\_genealg1 X4 X5 X6 k6\_numbers k6\_numbers X0 X1 = k8\_genealg1 \\ & X4 X5 X6 X0 X1) \wedge ((k10\_genealg1 X4 X5 X6 k6\_numbers X2 k6\_numbers X1 = \\ & k8\_genealg1 X4 X5 X6 X2 X1) \wedge ((k10\_genealg1 X4 X5 X6 k6\_numbers X2 \\ & X0 k6\_numbers = k8\_genealg1 X4 X5 X6 X2 X0) \wedge ((k10\_genealg1 X4 X5 X6 \\ & X3 k6\_numbers X0 k6\_numbers = k8\_genealg1 X4 X5 X6 X3 X0) \wedge ((k10\_genealg1 \\ & X4 X5 X6 X3 k6\_numbers k6\_numbers X1 = k8\_genealg1 X4 X5 X6 X3 X1) \wedge ( \\ & k10\_genealg1 X4 X5 X6 X3 X2 k6\_numbers k6\_numbers = k8\_genealg1 X4 \\ & X5 X6 X3 X2)))))))))) \end{aligned}$$