

t47\_genealg1  
(TMHK16iLBHYXsMtLcWo2SNaEvKNVbZunXaS)

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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  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k11\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & \quad X1 k5\_numbers) \Rightarrow (\forall X2.((\neg v1\_xboole\_0 X2) \wedge ((v1\_relat\_1 \\ & \quad X2) \wedge ((v2\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finseq\_1 X2)))))) \Rightarrow \\ & \quad (\forall X3.(m1\_genealg1 X3 X2) \Rightarrow (\forall X4.(m1\_genealg1 X4 X2) \Rightarrow \\ & \quad ((r1\_xxreal\_0 (k3\_finseq\_1 X3) X0) \Rightarrow (k8\_genealg1 X2 X3 X4 X0 X1 = \\ & \quad \quad k7\_genealg1 X2 X3 X4 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\ & \quad (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1 X4 k5\_numbers) \Rightarrow \\ & \quad \quad (\forall X5.((\neg v1\_xboole\_0 X5) \wedge ((v1\_relat\_1 X5) \wedge ((v2\_relat\_1 \\ & \quad \quad X5) \wedge ((v1\_funct\_1 X5) \wedge (v1\_finseq\_1 X5)))))) \Rightarrow (\forall X6.(m1\_genealg1 \\ & \quad \quad X6 X5) \Rightarrow (\forall X7.(m1\_genealg1 X7 X5) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 \\ & \quad \quad X6) X0) \Rightarrow (k11\_genealg1 X5 X6 X7 X0 X1 X2 X3 X4 = k10\_genealg1 X5 X6 X7 \\ & \quad \quad X1 X2 X3 X4)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X6) X1) \Rightarrow (k11\_genealg1 \\ & \quad \quad X5 X6 X7 X0 X1 X2 X3 X4 = k10\_genealg1 X5 X6 X7 X0 X2 X3 X4)) \wedge (((r1\_xxreal\_0 \\ & \quad \quad (k3\_finseq\_1 X6) X2) \Rightarrow (k11\_genealg1 X5 X6 X7 X0 X1 X2 X3 X4 = k10\_genealg1 \\ & \quad \quad X5 X6 X7 X0 X1 X3 X4)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X6) X3) \Rightarrow (k11\_genealg1 \\ & \quad \quad X5 X6 X7 X0 X1 X2 X3 X4 = k10\_genealg1 X5 X6 X7 X0 X1 X2 X4)) \wedge ((r1\_xxreal\_0 \\ & \quad \quad (k3\_finseq\_1 X6) X4) \Rightarrow (k11\_genealg1 X5 X6 X7 X0 X1 X2 X3 X4 = k10\_genealg1 \\ & \quad \quad X5 X6 X7 X0 X1 X2 X3)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\
& ((v1\_relat\_1 X4) \wedge ((v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X4) \Rightarrow ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 X4 X5 X6 X0 \\
& X1 X3 X2) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 X4 X5 X6 \\
& X0 X2 X1 X3) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 X4 X5 \\
& X6 X0 X2 X3 X1) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 X4 \\
& X5 X6 X0 X3 X2 X1) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X0 X2 X3) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X0 X3 X2) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X2 X0 X3) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X2 X3 X0) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X3 X0 X2) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X1 X3 X2 X0) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X2 X1 X0 X3) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X2 X1 X3 X0) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X2 X3 X0 X1) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X2 X3 X1 X0) \wedge ((k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X3 X1 X2 X0) \wedge (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k10\_genealg1 \\
& X4 X5 X6 X3 X2 X1 X0)))))))))))))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\
& ((v1\_relat\_1 X4) \wedge ((v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X4) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X0) \wedge ((r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X1) \wedge ((r1\_xxreal\_0 (k3\_finseq\_1 X5) X2) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X3)))) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = X5))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\
& ((v1\_relat\_1 X4) \wedge (v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X4) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X1)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X2 \\
& X3)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X2)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X1 \\
& X3)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X3)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X1 \\
& X2)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X2)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X0 \\
& X3)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X3)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X0 \\
& X2)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X2) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X3)) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8\_genealg1 X4 X5 X6 X0 \\
& X1))))))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\
& ((v1\_relat\_1 X4) \wedge (v2\_relat\_1 X4) \wedge ((v1\_funct\_1 X4) \wedge (v1\_finseq\_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1\_genealg1 X5 X4) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X4) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X0) \Rightarrow (k10\_genealg1 X4 X5 \\
& X6 X0 X1 X2 X3 = k9\_genealg1 X4 X5 X6 X1 X2 X3)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X1) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k9\_genealg1 X4 X5 X6 X0 X2 \\
& X3)) \wedge (((r1\_xxreal\_0 (k3\_finseq\_1 X5) X2) \Rightarrow (k10\_genealg1 X4 X5 \\
& X6 X0 X1 X2 X3 = k9\_genealg1 X4 X5 X6 X0 X1 X3)) \wedge ((r1\_xxreal\_0 (k3\_finseq\_1 \\
& X5) X3) \Rightarrow (k10\_genealg1 X4 X5 X6 X0 X1 X2 X3 = k9\_genealg1 X4 X5 X6 X0 X1 \\
& X2))))))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge (v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow (k9\_genealg1 X3 X4 X5 X0 X1 X2 = k9\_genealg1 X3 \\
& X4 X5 X2 X0 X1))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& \quad ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& \quad X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& \quad (m1\_genealg1 X5 X3) \Rightarrow ((k9\_genealg1 X3 X4 X5 X0 X1 X2 = k9\_genealg1 \\
& \quad X3 X4 X5 X1 X0 X2) \wedge (k9\_genealg1 X3 X4 X5 X0 X1 X2 = k9\_genealg1 X3 X4 X5 \\
& \quad X0 X2 X1))))))
\end{aligned} \tag{8}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& \quad ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& \quad X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& \quad (m1\_genealg1 X5 X3) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \wedge ((r1\_xxreal\_0 \\
& \quad (k3\_finseq\_1 X4) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X4) X2))) \Rightarrow (k9\_genealg1 \\
& \quad X3 X4 X5 X0 X1 X2 = X4))))))
\end{aligned} \tag{9}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& \quad ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& \quad X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& \quad (m1\_genealg1 X5 X3) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \wedge (r1\_xxreal\_0 \\
& \quad (k3\_finseq\_1 X4) X1) \Rightarrow (k9\_genealg1 X3 X4 X5 X2 X0 X1 = k7\_genealg1 \\
& \quad X3 X4 X5 X2))))))
\end{aligned} \tag{10}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& \quad X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& \quad ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& \quad X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& \quad (m1\_genealg1 X5 X3) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \wedge (r1\_xxreal\_0 \\
& \quad (k3\_finseq\_1 X4) X1) \Rightarrow (k9\_genealg1 X3 X4 X5 X0 X2 X1 = k7\_genealg1 \\
& \quad X3 X4 X5 X2))))))
\end{aligned} \tag{11}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \wedge (r1\_xxreal\_0 \\
& (k3\_finseq\_1 X4) X1)) \Rightarrow (k9\_genealg1 X3 X4 X5 X0 X1 X2 = k7\_genealg1 \\
& X3 X4 X5 X2))))))
\end{aligned} \tag{12}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow ((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \Rightarrow (k9\_genealg1 \\
& X3 X4 X5 X1 X2 X0 = k8\_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned} \tag{13}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow ((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \Rightarrow (k9\_genealg1 \\
& X3 X4 X5 X1 X0 X2 = k8\_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned} \tag{14}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1\_xboole\_0 X3) \wedge ((v1\_relat\_1 X3) \wedge ((v2\_relat\_1 X3) \wedge ((v1\_funct\_1 \\
& X3) \wedge (v1\_finseq\_1 X3)))))) \Rightarrow (\forall X4.(m1\_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1\_genealg1 X5 X3) \Rightarrow ((r1\_xxreal\_0 (k3\_finseq\_1 X4) X0) \Rightarrow (k9\_genealg1 \\
& X3 X4 X5 X0 X1 X2 = k8\_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned} \tag{15}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.((\neg v1\_xboole\_0 X2) \wedge ((v1\_relat\_1 \\
& X2) \wedge ((v2\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finseq\_1 X2)))))) \Rightarrow \\
& (\forall X3.(m1\_genealg1 X3 X2) \Rightarrow (\forall X4.(m1\_genealg1 X4 X2) \Rightarrow \\
& ((r1\_xxreal\_0 (k3\_finseq\_1 X3) X0) \Rightarrow (k8\_genealg1 X2 X3 X4 X1 X0 = \\
& k7\_genealg1 X2 X3 X4 X1))))))
\end{aligned} \tag{16}$$

**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.(m1\_subset\_1 X4 k5\_numbers) \Rightarrow \\
& (\forall X5.((\neg v1\_xboole\_0 X5) \wedge ((v1\_relat\_1 X5) \wedge ((v2\_relat\_1 \\
& X5) \wedge ((v1\_funct\_1 X5) \wedge (v1\_finseq\_1 X5)))))) \Rightarrow (\forall X6.(m1\_genealg1 \\
& X6 X5) \Rightarrow (\forall X7.(m1\_genealg1 X7 X5) \Rightarrow (((r1\_xxreal\_0 (k3\_finseq\_1 \\
& X6) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X1)) \Rightarrow (k11\_genealg1 X5 X6 \\
& X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X2 X3 X4)) \wedge (((r1\_xxreal\_0 ( \\
& k3\_finseq\_1 X6) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X2)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X1 X3 X4)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X3)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X1 X2 X4)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X0) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X4)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X1 X2 X3)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X2)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X3 X4)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X3)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X2 X4)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X4)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X2 X3)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X2) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X3)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X1 X4)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X2) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X4)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X1 X3)) \wedge (((r1\_xxreal\_0 \\
& (k3\_finseq\_1 X6) X3) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 X6) X4)) \Rightarrow (k11\_genealg1 \\
& X5 X6 X7 X0 X1 X2 X3 X4 = k9\_genealg1 X5 X6 X7 X0 X1 X2)))))))))))))
\end{aligned}$$