

t35_genealg1
(TMMhugaiMwForuuiJhPcvkaA3UqdUjyz4Lg)

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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 $k10_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& \quad X1 k5_numbers) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& \quad X2) \wedge ((v2_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2)))))) \Rightarrow \\
& \quad (\forall X3.(m1_genealg1 X3 X2) \Rightarrow (\forall X4.(m1_genealg1 X4 X2) \Rightarrow \\
& \quad ((r1_xxreal_0 (k3_finseq_1 X3) X0) \Rightarrow (k8_genealg1 X2 X3 X4 X0 X1 = \\
& \quad \quad k7_genealg1 X2 X3 X4 X1))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 k5_numbers) \Rightarrow (\forall X4.((\neg v1_xboole_0 X4) \wedge \\
& ((v1_relat_1 X4) \wedge (v2_relat_1 X4) \wedge ((v1_funct_1 X4) \wedge (v1_finseq_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1_genealg1 X5 X4) \Rightarrow (\forall X6.(m1_genealg1 \\
& X6 X4) \Rightarrow (((r1_xxreal_0 (k3_finseq_1 X5) X0) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X1)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X2 \\
& X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X0) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X2)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X1 \\
& X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X0) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X3)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X1 \\
& X2)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X1) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X2)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X0 \\
& X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X1) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X3)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X0 \\
& X2)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X2) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X3)) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k8_genealg1 X4 X5 X6 X0 \\
& X1))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge (v2_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2)))))) \Rightarrow \\
& (\forall X3.(m1_genealg1 X3 X2) \Rightarrow (\forall X4.(m1_genealg1 X4 X2) \Rightarrow \\
& (k8_genealg1 X2 X3 X4 X0 X1 = k8_genealg1 X2 X3 X4 X1 X0))))
\end{aligned} \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 k5_numbers) \Rightarrow (\forall X4.((\neg v1_xboole_0 X4) \wedge \\
& ((v1_relat_1 X4) \wedge (v2_relat_1 X4) \wedge ((v1_funct_1 X4) \wedge (v1_finseq_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1_genealg1 X5 X4) \Rightarrow (\forall X6.(m1_genealg1 \\
& X6 X4) \Rightarrow (((r1_xxreal_0 (k3_finseq_1 X5) X0) \wedge ((r1_xxreal_0 (k3_finseq_1 \\
& X5) X1) \wedge (r1_xxreal_0 (k3_finseq_1 X5) X2))) \Rightarrow (k10_genealg1 X4 \\
& X5 X6 X0 X1 X2 X3 = k7_genealg1 X4 X5 X6 X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 \\
& X5) X0) \wedge ((r1_xxreal_0 (k3_finseq_1 X5) X1) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X3))) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k7_genealg1 X4 X5 X6 X2)) \wedge \\
& (((r1_xxreal_0 (k3_finseq_1 X5) X0) \wedge ((r1_xxreal_0 (k3_finseq_1 \\
& X5) X2) \wedge (r1_xxreal_0 (k3_finseq_1 X5) X3))) \Rightarrow (k10_genealg1 X4 \\
& X5 X6 X0 X1 X2 X3 = k7_genealg1 X4 X5 X6 X1)) \wedge (((r1_xxreal_0 (k3_finseq_1 \\
& X5) X1) \wedge ((r1_xxreal_0 (k3_finseq_1 X5) X2) \wedge (r1_xxreal_0 (k3_finseq_1 \\
& X5) X3))) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k7_genealg1 X4 X5 X6 X0))))))))))
\end{aligned}$$