

t34_genealg1
(TMMkNr2qmwHxBWUjg8Zb3NMe2JaxRXo6WZY)

October 27, 2020

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 $k8_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 k5_numbers) \Rightarrow (\forall X4.((\neg v1_xboole_0 X4) \wedge \\
& ((v1_relat_1 X4) \wedge ((v2_relat_1 X4) \wedge ((v1_funct_1 X4) \wedge (v1_finseq_1 \\
& X4)))))) \Rightarrow (\forall X5.(m1_genealg1 X5 X4) \Rightarrow (\forall X6.(m1_genealg1 \\
& X6 X4) \Rightarrow (((r1_xxreal_0 (k3_finseq_1 X5) X0) \Rightarrow (k10_genealg1 X4 X5 \\
& X6 X0 X1 X2 X3 = k9_genealg1 X4 X5 X6 X1 X2 X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 \\
& X5) X1) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k9_genealg1 X4 X5 X6 X0 X2 \\
& X3)) \wedge (((r1_xxreal_0 (k3_finseq_1 X5) X2) \Rightarrow (k10_genealg1 X4 X5 \\
& X6 X0 X1 X2 X3 = k9_genealg1 X4 X5 X6 X0 X1 X3)) \wedge ((r1_xxreal_0 (k3_finseq_1 \\
& X5) X3) \Rightarrow (k10_genealg1 X4 X5 X6 X0 X1 X2 X3 = k9_genealg1 X4 X5 X6 X0 X1 \\
& X2))))))))))
\end{aligned}$$

(1)

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge ((v1_relat_1 X3) \wedge ((v2_relat_1 X3) \wedge ((v1_funct_1 \\
& X3) \wedge (v1_finseq_1 X3)))))) \Rightarrow (\forall X4.(m1_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1_genealg1 X5 X3) \Rightarrow ((r1_xxreal_0 (k3_finseq_1 X4) X0) \Rightarrow (k9_genealg1 \\
& X3 X4 X5 X1 X2 X0 = k8_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned}$$

(2)

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge ((v1_relat_1 X3) \wedge ((v2_relat_1 X3) \wedge ((v1_funct_1 \\
& X3) \wedge (v1_finseq_1 X3)))))) \Rightarrow (\forall X4.(m1_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1_genealg1 X5 X3) \Rightarrow ((r1_xxreal_0 (k3_finseq_1 X4) X0) \Rightarrow (k9_genealg1 \\
& X3 X4 X5 X1 X0 X2 = k8_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge ((v1_relat_1 X3) \wedge ((v2_relat_1 X3) \wedge ((v1_funct_1 \\
& X3) \wedge (v1_finseq_1 X3)))))) \Rightarrow (\forall X4.(m1_genealg1 X4 X3) \Rightarrow (\forall X5. \\
& (m1_genealg1 X5 X3) \Rightarrow ((r1_xxreal_0 (k3_finseq_1 X4) X0) \Rightarrow (k9_genealg1 \\
& X3 X4 X5 X0 X1 X2 = k8_genealg1 X3 X4 X5 X1 X2))))))
\end{aligned} \tag{4}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{5}$$

Theorem 1

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