

t63_compos_1 (TMHFJwJigHrrXuimeBmVySW- PbUcdeCQWiFh)

October 27, 2020

Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $k2_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_compos_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_compos_1 : \iota \Rightarrow \iota$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_ordinal4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_afinsq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_compos_1 X0) \Rightarrow ((\neg v1_xboole_0 (k4_compos_1 X0)) \wedge \\ & ((v1_relat_1 (k4_compos_1 X0)) \wedge ((v4_relat_1 (k4_compos_1 X0) \\ & k5_numbers) \wedge ((v5_relat_1 (k4_compos_1 X0) (u1_compos_1 X0)) \wedge \\ & ((v1_funct_1 (k4_compos_1 X0)) \wedge ((v1_finset_1 (k4_compos_1 X0)) \wedge \\ & (v1_afinsq_1 (k4_compos_1 X0)))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((l1_compos_1 X0) \wedge ((v1_relat_1 X1) \wedge ((\\ & v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 (u1_compos_1 X0)) \wedge \\ & ((v1_funct_1 X1) \wedge ((v1_finset_1 X1) \wedge (v1_afinsq_1 X1))))))) \Rightarrow \\ & ((\neg v1_xboole_0 (k10_compos_1 X0 X1)) \wedge ((v1_relat_1 (k10_compos_1 \\ & X0 X1)) \wedge ((v4_relat_1 (k10_compos_1 X0 X1) k5_numbers) \wedge ((v5_relat_1 \\ & (k10_compos_1 X0 X1) (u1_compos_1 X0)) \wedge ((v1_funct_1 (k10_compos_1 \\ & X0 X1)) \wedge ((v1_finset_1 (k10_compos_1 X0 X1)) \wedge (v1_afinsq_1 (k10_compos_1 \\ & X0 X1)))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v5_ordinal1 X0) \wedge ((v1_funct_1 \\
& X0) \wedge (v1_finset_1 X0)))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v5_ordinal1 \\
& X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow (\forall X2.((v1_relat_1 \\
& X2) \wedge ((v5_ordinal1 X2) \wedge (v1_funct_1 X2)))) \Rightarrow ((X2 = k1_ordinal4 X0 \\
& X1) \Leftrightarrow ((k9_xtuple_0 X2 = k2_nat_1 (k1_afinsq_1 X0) (k1_afinsq_1 \\
& X1)) \wedge ((\forall X3.(v7_ordinal1 X3) \Rightarrow ((X3 \in k2_afinsq_1 X0) \Rightarrow (k1_funct_1 \\
& X2 X3 = k1_funct_1 X0 X3))) \wedge (\forall X3.(v7_ordinal1 X3) \Rightarrow ((X3 \in \\
& k2_afinsq_1 X1) \Rightarrow (k1_funct_1 X2 (k2_nat_1 (k1_afinsq_1 X0) X3) = \\
& k1_funct_1 X1 X3)))))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_compos_1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((\\
& v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 (u1_compos_1 X0)) \wedge \\
& ((v1_funct_1 X1) \wedge ((v1_finset_1 X1) \wedge (v1_afinsq_1 X1)))))) \Rightarrow (\\
& k10_compos_1 X0 X1 = k1_ordinal4 X1 (k4_compos_1 X0))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\
& X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 X0)))))) \Rightarrow ((v1_relat_1 X0) \wedge \\
& ((v5_ordinal1 X0) \wedge (v1_funct_1 X0)))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(l1_compos_1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\
& ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 \\
& (u1_compos_1 X0)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq_1 \\
& X2)))))) \Rightarrow ((X1 \in k2_afinsq_1 X2) \Rightarrow (k1_funct_1 (k10_compos_1 X0 \\
& X2) X1 = k1_funct_1 X2 X1)))
\end{aligned}$$