

t57_euclid_8

(TMNg3CJTbVU1VHoo3F76XQpDgTCn7HmhKa1)

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Let $v1_funct.1 : \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_seq.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k6_euclid.8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_euclid.8 : \iota$ be given. Let $k3_euclid.8 : \iota$ be given. Let $k4_euclid.8 : \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1_funct.1 X0) \wedge (m1_subset.1 X0 (k1_zfmisc.1 (k2_zfmisc.1 \\
 & \quad k1_numbers k1_numbers)))) \Rightarrow (\forall X1.((v1_funct.1 X1) \wedge (m1_subset.1 \\
 & \quad X1 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers k1_numbers)))) \Rightarrow (\forall X2. \\
 & ((v1_funct.1 X2) \wedge (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers \\
 & \quad k1_numbers)))) \Rightarrow (\forall X3.(m1_subset.1 X3 k1_numbers) \Rightarrow (k3_funct.2 \\
 & \quad k1_numbers (k1_euclid np_3) (k6_euclid.8 X0 X1 X2) X3 = k7_euclid \\
 & \quad np_3 (k7_euclid np_3 (k9_euclid np_3 k2_euclid.8 (k1_seq.1 \\
 & \quad X0 X3)) (k9_euclid np_3 k3_euclid.8 (k1_seq.1 X1 X3))) (k9_euclid \\
 & \quad np_3 k4_euclid.8 (k1_seq.1 X2 X3))))))
 \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.((v1_funct.1 X0) \wedge (m1_subset.1 X0 (k1_zfmisc.1 (k2_zfmisc.1 \\
 & \quad k1_numbers k1_numbers)))) \Rightarrow (\forall X1.((v1_funct.1 X1) \wedge (m1_subset.1 \\
 & \quad X1 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers k1_numbers)))) \Rightarrow (\forall X2. \\
 & ((v1_funct.1 X2) \wedge (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers \\
 & \quad k1_numbers)))) \Rightarrow (\forall X3.((v1_funct.1 X3) \wedge (m1_subset.1 X3 \\
 & \quad (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers k1_numbers)))) \Rightarrow (\forall X4. \\
 & ((v1_funct.1 X4) \wedge (m1_subset.1 X4 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers \\
 & \quad k1_numbers)))) \Rightarrow (\forall X5.((v1_funct.1 X5) \wedge (m1_subset.1 X5 \\
 & \quad (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers k1_numbers)))) \Rightarrow (\forall X6. \\
 & (m1_subset.1 X6 k1_numbers) \Rightarrow (\forall X7.(m1_subset.1 X7 k1_numbers) \Rightarrow \\
 & (((k1_seq.1 X0 X6 = k1_seq.1 X1 X7) \wedge ((k1_seq.1 X2 X6 = k1_seq.1 X3 \\
 & \quad X7) \wedge (k1_seq.1 X4 X6 = k1_seq.1 X5 X7))) \Rightarrow (k3_funct.2 k1_numbers \\
 & \quad (k1_euclid np_3) (k6_euclid.8 X0 X2 X4) X6 = k3_funct.2 k1_numbers \\
 & \quad (k1_euclid np_3) (k6_euclid.8 X1 X3 X5) X7))))))
 \end{aligned}$$