

## t56\_euclid\_8

(TMYFXVqj1KE7RPmXmUTDH75mreFqEDayURH)

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Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_3 : \iota$  be given. 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  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_euclid\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\
 & ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers \\
 & \quad k1\_numbers)))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 \\
 & \quad (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow (\forall X3. \\
 & ((v1\_funct\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers \\
 & \quad k1\_numbers)))) \Rightarrow (\forall X4.(m1\_subset\_1 X4 k1\_numbers) \Rightarrow ((X0 = \\
 & \quad k3\_funct\_2 k1\_numbers (k1\_euclid np\_3) (k6\_euclid\_8 X1 X2 X3) \\
 & X4) \Leftrightarrow ((k1\_seq\_1 X0 np\_1 = k1\_seq\_1 X1 X4) \wedge ((k1\_seq\_1 X0 np\_2 = k1\_seq\_1 \\
 & \quad X2 X4) \wedge (k1\_seq\_1 X0 np\_3 = k1\_seq\_1 X3 X4)))))))))
 \end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X2. (( \\ & v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers \\ & k1\_numbers)))) \Rightarrow (\forall X3. ((v1\_funct\_1 X3) \wedge (m1\_subset\_1 X3 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow (\forall X4. \\ & ((v1\_funct\_1 X4) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers \\ & k1\_numbers)))) \Rightarrow (\forall X5. ((v1\_funct\_1 X5) \wedge (m1\_subset\_1 X5 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow (\forall X6. \\ & ((v1\_funct\_1 X6) \wedge (m1\_subset\_1 X6 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers \\ & k1\_numbers)))) \Rightarrow (\forall X7. ((v1\_funct\_1 X7) \wedge (m1\_subset\_1 X7 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow (\forall X8. \\ & (m1\_subset\_1 X8 k1\_numbers) \Rightarrow (\forall X9. (m1\_subset\_1 X9 k1\_numbers) \Rightarrow \\ & (((X0 = k3\_funct\_2 k1\_numbers (k1\_euclid np\_3) (k6\_euclid\_8 X2 \\ & X3 X4) X8) \wedge ((X1 = k3\_funct\_2 k1\_numbers (k1\_euclid np\_3) (k6\_euclid\_8 \\ & X5 X6 X7) X9) \wedge (X0 = X1))) \Rightarrow ((k1\_seq\_1 X2 X8 = k1\_seq\_1 X5 X9) \wedge ((k1\_seq\_1 \\ & X3 X8 = k1\_seq\_1 X6 X9) \wedge (k1\_seq\_1 X4 X8 = k1\_seq\_1 X7 X9)))))))))) \end{aligned}$$