

# t62\_pnproc\_1 (TMJQEPJP- MaoWEn1TC24gn6Zv3FBfr9P3x6m)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $v2\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $r1\_xreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k12\_pnproc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.((v1\_relat\_1 \\ X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \Rightarrow (\forall X2.((v1\_relat\_1 \\ X2) \wedge ((v1\_funct\_1 X2) \wedge (v2\_finseq\_1 X2)))) \Rightarrow ((r1\_xreal\_0 (k3\_finseq\_1 \\ X1) X0) \Rightarrow (r1\_xboole\_0 (k4\_finseq\_1 X1) (k9\_xtuple\_0 (k12\_pnproc\_1 \\ X2 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow (k4\_finseq\_1 X0 = k9\_xtuple\_0 X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.(v1\_relat\_1 X1) \Rightarrow ((r1\_xboole\_0 (k9\_xtuple\_0 X0) (k9\_xtuple\_0 X1)) \Rightarrow (r1\_xboole\_0 X0 X1))) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v2\_finseq\_1 \\ X0))) \wedge (m1\_subset\_1 X1 k5\_numbers)) \Rightarrow ((v1\_relat\_1 (k12\_pnproc\_1 \\ X0 X1)) \wedge ((v1\_funct\_1 (k12\_pnproc\_1 X0 X1)) \wedge (v2\_finseq\_1 (k12\_pnproc\_1 \\ X0 X1)))) \end{aligned} \tag{4}$$

## Theorem 1

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.((v1\_relat\_1 \\ X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \Rightarrow (\forall X2.((v1\_relat\_1 \\ X2) \wedge ((v1\_funct\_1 X2) \wedge (v2\_finseq\_1 X2)))) \Rightarrow ((r1\_xreal\_0 (k3\_finseq\_1 \\ X1) X0) \Rightarrow (r1\_xboole\_0 X1 (k12\_pnproc\_1 X2 X0)))) \end{aligned}$$