

# t32\_comseq\_3 (TM- bXBaD8pukJpt4YqMcpparU4VZT29dwuVh)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k2\_numbers : \iota$  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  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_valued\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_series\_1 : \iota \Rightarrow \iota$  be given. Let  $k7\_comseq\_3 : \iota \Rightarrow \iota$  be given. Let  $k10\_comseq\_3 : \iota \Rightarrow \iota$  be given. Let  $k8\_comseq\_3 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))) \Rightarrow \\ & ((r2\_funct\_2 k5\_numbers k1\_numbers (k3\_series\_1 (k7\_comseq\_3 \\ & X0)) (k7\_comseq\_3 (k10\_comseq\_3 X0))) \wedge (r2\_funct\_2 k5\_numbers \\ & k1\_numbers (k3\_series\_1 (k8\_comseq\_3 X0)) (k8\_comseq\_3 (k10\_comseq\_3 \\ & X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))) \Rightarrow \\ & (\forall X1.(m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow ((r2\_funct\_2 \\ & k5\_numbers k1\_numbers (k1\_valued\_0 k1\_numbers (k7\_comseq\_3 X0) \\ & X1) (k7\_comseq\_3 (k1\_valued\_0 k2\_numbers X0 X1))) \wedge (r2\_funct\_2 \\ & k5\_numbers k1\_numbers (k1\_valued\_0 k1\_numbers (k8\_comseq\_3 X0) \\ & X1) (k8\_comseq\_3 (k1\_valued\_0 k2\_numbers X0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X1)))))) \wedge ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 X0 X1) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((r2\_funct\_2 X0 X1 X2 \\ & X3) \Leftrightarrow (X2 = X3)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ & ((v1\_funct\_1 (k8\_comseq\_3 X0)) \wedge ((v1\_funct\_2 (k8\_comseq\_3 X0) \\ & k5\_numbers k1\_numbers) \wedge (m1\_subset\_1 (k8\_comseq\_3 X0) (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ & ((v1\_funct\_1 (k7\_comseq\_3 X0)) \wedge ((v1\_funct\_2 (k7\_comseq\_3 X0) \\ & k5\_numbers k1\_numbers) \wedge (m1\_subset\_1 (k7\_comseq\_3 X0) (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k1\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \Rightarrow \\ & ((v1\_funct\_1 (k3\_series\_1 X0)) \wedge ((v1\_funct\_2 (k3\_series\_1 X0) \\ & k5\_numbers k1\_numbers) \wedge (m1\_subset\_1 (k3\_series\_1 X0) (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers k1\_numbers)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ & ((v1\_funct\_1 (k10\_comseq\_3 X0)) \wedge ((v1\_funct\_2 (k10\_comseq\_3 \\ & X0) k5\_numbers k2\_numbers) \wedge (m1\_subset\_1 (k10\_comseq\_3 X0) (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \end{aligned} \quad (7)$$

### Theorem 1

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ & (\forall X1.(m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow ((r2\_funct\_2 \\ & k5\_numbers k1\_numbers (k1\_valued\_0 k1\_numbers (k3\_series\_1 ( \\ & k7\_comseq\_3 X0)) X1) (k7\_comseq\_3 (k1\_valued\_0 k2\_numbers (k10\_comseq\_3 \\ & X0) X1))) \wedge (r2\_funct\_2 k5\_numbers k1\_numbers (k1\_valued\_0 k1\_numbers \\ & (k3\_series\_1 (k8\_comseq\_3 X0)) X1) (k8\_comseq\_3 (k1\_valued\_0 \\ & k2\_numbers (k10\_comseq\_3 X0) X1)))))) \end{aligned}$$