

# t32\_seq\_2 (TMX- CQyru1pjGkmwRaDU4reP3dCRiA7LeGaX)

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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  $v2\_comseq\_2 : \iota \Rightarrow o$  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  $k2\_seq\_2 : \iota \Rightarrow \iota$  be given. Let  $k55\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k3\_comseq\_2 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $k18\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k17\_complex1 \\ (k3\_xcmplx\_0 X0 X1) = k8\_real\_1 (k17\_complex1 X0) (k17\_complex1 \\ X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ ((v2\_comseq\_2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ k5\_numbers k2\_numbers)))))) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge ( \\ (v1\_funct\_2 X1 k5\_numbers k2\_numbers) \wedge ((v2\_comseq\_2 X1) \wedge (m1\_subset\_1 \\ X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow (k3\_comseq\_2 \\ (k19\_valued\_1 k5\_numbers k2\_numbers k2\_numbers X0 X1) = k9\_complex1 \\ (k3\_comseq\_2 X0) (k3\_comseq\_2 X1))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ ((v2\_comseq\_2 X0) \Rightarrow (k2\_seq\_2 (k55\_valued\_1 k5\_numbers k2\_numbers \\ X0) = k17\_complex1 (k3\_comseq\_2 X0))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1 X0 k2\_numbers)\wedge(m1\_subset\_1 X1 k2\_numbers))\Rightarrow(k9\_complex1 X0 X1 = k3\_xcmplx\_0 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v1\_membered X1)\wedge((v1\_membered X2)\wedge(((v1\_funct\_1 X3)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\wedge((v1\_funct\_1 X4)\wedge(m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X2))))))))\Rightarrow(k19\_valued\_1 X0 X1 X2 X3 X4 = k18\_valued\_1 X3 X4) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_funct\_1 X0)\wedge((v1\_funct\_2 X0 k5\_numbers k2\_numbers)\wedge((v2\_comseq\_2 X0)\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers))))))\wedge((v1\_funct\_1 X1)\wedge((v1\_funct\_2 X1 k5\_numbers k2\_numbers)\wedge((v2\_comseq\_2 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))))\Rightarrow((v1\_funct\_1 (k18\_valued\_1 X0 X1))\wedge((v1\_funct\_2 (k18\_valued\_1 X0 X1) k5\_numbers k2\_numbers)\wedge(v2\_comseq\_2 (k18\_valued\_1 X0 X1)))) \quad (6)$$

Assume the following.

$$v1\_membered k2\_numbers \quad (7)$$

Assume the following.

$$\forall X0.((v1\_funct\_1 X0)\wedge((v1\_funct\_2 X0 k5\_numbers k2\_numbers)\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))\Rightarrow(m1\_subset\_1 (k3\_comseq\_2 X0) k2\_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v1\_membered X1)\wedge((v1\_membered X2)\wedge(((v1\_funct\_1 X3)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\wedge((v1\_funct\_1 X4)\wedge(m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X2))))))))\Rightarrow((v1\_funct\_1 (k19\_valued\_1 X0 X1 X2 X3 X4))\wedge(m1\_subset\_1 (k19\_valued\_1 X0 X1 X2 X3 X4) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k2\_numbers)))) \quad (9)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_numbers)\Rightarrow(v1\_xcmplx\_0 X0) \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & ((v2\_comseq\_2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers k2\_numbers)))))) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge \\ & (v1\_funct\_2 X1 k5\_numbers k2\_numbers) \wedge ((v2\_comseq\_2 X1) \wedge (m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow (k2\_seq\_2 \\ & (k55\_valued\_1 k5\_numbers k2\_numbers (k19\_valued\_1 k5\_numbers \\ & k2\_numbers k2\_numbers X0 X1)) = k8\_real\_1 (k17\_complex1 (k3\_comseq\_2 \\ & X0)) (k17\_complex1 (k3\_comseq\_2 X1)))) \end{aligned}$$