

# t26\_rcomp\_3 (TMPAJeeCP- WhqaZYcT4C5GkHPFqwhEavmXyS)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v3\_xxreal\_2 : \iota \Rightarrow o$  be given. Let  $k5\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_limfunc1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k9\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xxreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow ((X1 \in k4\_xxreal\_1 X0 k1\_xxreal\_0) \Leftrightarrow (\neg r1\_xxreal\_0 X1 X0))) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xxreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (k5\_seq\_4 X0 = k3\_seq\_4 X0) \quad (5)$$

Assume the following.

$$\forall X0. (v3\_membered X0) \Rightarrow (v1\_xreal\_0 (k3\_seq\_4 X0)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (k3\_limfunc1 X0 = k4\_xxreal\_1 X0 k1\_xxreal\_0) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(v3\_membered X0) \Rightarrow & ((v3\_xxreal\_2 X0) \Rightarrow ((v1\_xboole\_0 \\ & X0) \vee (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((X1 = k3\_seq\_4 X0) \Leftrightarrow ((\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1\_xxreal\_0 X1 X2)))) \wedge (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow (\neg(\neg r1\_xxreal\_0 X2 k6\_numbers) \wedge (\forall X3. \\ & (v1\_xreal\_0 X3) \Rightarrow (\neg(X3 \in X0) \wedge (\neg r1\_xxreal\_0 (k9\_binop\_2 X1 X2) X3)))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (v3\_membered X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (11)$$

Assume the following.

$$\forall X0.(v3\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v1\_xreal\_0 X1)) \quad (12)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow ((v3\_xxreal\_2 X0) \Rightarrow ((k5\_seq\_4 X0 \in X0) \vee (r1\_tarski X0 (k3\_limfunc1 (k5\_seq\_4 X0))))))$$