

t20\_rcomp\_3 (TM-  
RWJ485Yfct7gefEoNJBW4wgHoxQpjVMdW)

October 27, 2020

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  $v4\_xxreal\_2 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_limfunc1 : \iota \Rightarrow \iota$  be given. Let  $k4\_seq\_4 : \iota \Rightarrow \iota$  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  $k3\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xxreal\_0 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k10\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xxreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow ((X1 \in k3\_xxreal\_1 k2\_xxreal\_0 X0) \Leftrightarrow (r1\_xxreal\_0 X1 X0))) \quad (3)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (k4\_seq\_4 X0 = k2\_seq\_4 X0) \quad (4)$$

Assume the following.

$$\forall X0. (v3\_membered X0) \Rightarrow (v1\_xreal\_0 (k2\_seq\_4 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v3\_membered\ X0) \Rightarrow ((v4\_xxreal\_2\ X0) \Rightarrow ((v1\_xboole\_0 \\ X0) \vee (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow ((X1 = k2\_seq\_4\ X0) \Leftrightarrow ((\forall X2. \\ (v1\_xreal\_0\ X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1\_xxreal\_0\ X2\ X1)))) \wedge (\forall X2. \\ (v1\_xreal\_0\ X2) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X2\ k6\_numbers) \wedge (\forall X3. \\ (v1\_xreal\_0\ X3) \Rightarrow (\neg(X3 \in X0) \wedge (\neg r1\_xxreal\_0\ X3\ (k10\_binop\_2\ X1\ X2)))))))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (k1\_limfunc1\ X0 = k3\_xxreal\_1\ k2\_xxreal\_0\ X0) \quad (8)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers)) \Rightarrow (v3\_membered\ X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xxreal\_0\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \quad (11)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers)) \Rightarrow ((v4\_xxreal\_2\ X0) \Rightarrow (r1\_tarski\ X0\ (k1\_limfunc1\ (k4\_seq\_4\ X0))))$$