

## t7\_measure7

(TMZKu7jTe4NJKVma43xY4Nn9hhBYZ7W1f8p)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_numbers : \iota$  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  $v6\_supinf\_2 : \iota \Rightarrow o$  be given. Let  $k1\_measure7 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_supinf\_2 : \iota$  be given. Let  $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 X0 k7\_numbers)))) \Rightarrow ((v6\_supinf\_2 X1) \Leftrightarrow (\forall X2. \\ (m1\_subset\_1 X2 X0) \Rightarrow (r1\_xxreal\_0 k1\_supinf\_2 (k12\_supinf\_2 X1 \\ X2)))) \end{aligned} \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. ((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow (r1\_xxreal\_0 X0 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (6)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (7)$$

Assume the following.

$$k1\_supinf\_2 = k1\_xboole\_0 \quad (8)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0) \wedge ((v1\_xcmplx\_0 X0) \wedge ((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X0))) \quad (9)$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (10)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((v1\_funct\_1 X1) \wedge \\ & (v1\_funct\_2 X1 X0 k7\_numbers) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 k7\_numbers)))))) \Rightarrow ((v1\_funct\_1 (k1\_measure7 X0 X1)) \wedge ((v1\_funct\_2 \\ & (k1\_measure7 X0 X1) k5\_numbers k7\_numbers) \wedge (m1\_subset\_1 (k1\_measure7 \\ & X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k7\_numbers)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge \\ & (v1\_funct\_2 X1 X0 k7\_numbers) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 k7\_numbers)))))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ & X2 k5\_numbers k7\_numbers) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers k7\_numbers)))))) \Rightarrow ((X2 = k1\_measure7 X0 X1) \Leftrightarrow (\forall X3. \\ & (m2\_subset\_1 X3 k1\_numbers k5\_numbers) \Rightarrow (((X3 \in X0) \Rightarrow (k12\_supinf\_2 \\ & X2 X3 = k12\_supinf\_2 X1 X3)) \wedge ((\neg X3 \in X0) \Rightarrow (k12\_supinf\_2 X2 X3 = k1\_supinf\_2)))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (14)$$

### Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge \\ & (v1\_funct\_2 X1 X0 k7\_numbers) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 k7\_numbers)))))) \Rightarrow ((v6\_supinf\_2 X1) \Rightarrow (v6\_supinf\_2 (k1\_measure7 \\ & X0 X1))) \end{aligned}$$