

t7\_interval  
(TMR2arJL8nTBfKJ1hoYEURu28hkmhUPfF1r)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_interval : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_subset\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 X0)) \Rightarrow ((k1\_interval X0 X1 X2 \neq k1\_xboole\_0) \Rightarrow \\ & (r1\_tarski X1 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. r1\_tarski k1\_xboole\_0 X0 \tag{2}$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\forall X0. m1\_subset\_1 (k1\_subset\_1 X0) (k1\_zfmisc\_1 X0) \tag{4}$$

Assume the following.

$$\forall X0. k1\_subset\_1 X0 = k1\_xboole\_0 \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))) \Rightarrow (k1\_interval X0 X1 (k1\_subset\_1 \\ & X0) = k1\_xboole\_0)) \end{aligned}$$