

t21\_wellord1 (TMKLu-  
vQsB5zdLNtW2VhiUpL3AgG6bGPtf9M)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k2\_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1\_relat\_1 X2) \Rightarrow (k2\_wellord1 \\ & (k2\_wellord1 X2 X0) X1 = k2\_wellord1 X2 (k3\_xboole\_0 X0 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X2 = k3\_xboole\_0 X0 X1) \Leftrightarrow (\forall X3. \\ & (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k2\_wellord1 (k2\_wellord1 \\ & X1 X0) X0 = k2\_wellord1 X1 X0) \end{aligned}$$