

t19_wellord1
(TMWeq2cppjbqNdSU82QcPs7tkJbv4eNhuQs)

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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. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xboole_0 (k3_xboole_0 X0 X1) X2 = k3_xboole_0 X0 (k3_xboole_0 X1 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k2_zfmisc_1 (k3_xboole_0 X0 X1) (k3_xboole_0 X2 X3) = k3_xboole_0 (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 X1 X3) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X0) \Rightarrow (v1_relat_1 (k2_wellord1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. k2_wellord1 X0 X1 = k3_xboole_0 X0 (k2_zfmisc_1 X1 X1)) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k2_wellord1 (k2_wellord1 X2 X0) X1 = k2_wellord1 X2 (k3_xboole_0 X0 X1))$$