

t8_card_2 (TMRmsbTh-
bKWtF1SZwrRRWC9oHVqMJSXa739)

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Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (r2_wellord2 (k2_zfmisc_1 X0 X1) (k2_zfmisc_1 \\ & (k1_card_1 X0) X1)) \wedge ((r2_wellord2 (k2_zfmisc_1 X0 X1) (k2_zfmisc_1 \\ & X0 (k1_card_1 X1))) \wedge ((r2_wellord2 (k2_zfmisc_1 X0 X1) (k2_zfmisc_1 \\ & (k1_card_1 X0) (k1_card_1 X1))) \wedge ((k1_card_1 (k2_zfmisc_1 X0 X1) = \\ & k1_card_1 (k2_zfmisc_1 (k1_card_1 X0) X1)) \wedge ((k1_card_1 (k2_zfmisc_1 \\ & X0 X1) = k1_card_1 (k2_zfmisc_1 X0 (k1_card_1 X1))) \wedge (k1_card_1 \\ & (k2_zfmisc_1 X0 X1) = k1_card_1 (k2_zfmisc_1 (k1_card_1 X0) (k1_card_1 \\ & X1))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (r2_wellord2 X0 X1) \Leftrightarrow (k1_card_1 X0 = k1_card_1 X1) \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((r2_wellord2 X0 \\ & X1) \wedge (r2_wellord2 X2 X3)) \Rightarrow ((r2_wellord2 (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 \\ & X1 X3)) \wedge (k1_card_1 (k2_zfmisc_1 X0 X2) = k1_card_1 (k2_zfmisc_1 \\ & X1 X3))) \end{aligned}$$