t29_ordinal6 (TMZLd-HAT8U1HXyMuqCQniHom1VVJM1Y6EBd)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v5\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_ordinal2 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_ordinal6 : \iota \Rightarrow \iota$ be given. Let $r1\_abian : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k1\_ordinal6 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v5\_ordinal1\ X0) \wedge (v1\_ordinal2\ X0)))) \Rightarrow (k2\_ordinal1\ (ReplSep\ (toset\ (\lambda X1 : \iota . m1\_subset\_1\ X1\ (k9\_xtuple\_0\ X0)))\ (\lambda X1 : \iota . r1\_abian\ X1\ X0)\ (\lambda X1 : \iota . X1)) = ReplSep\ (toset\ (\lambda X1 : \iota . m1\_subset\_1\ X1\ (k9\_xtuple\_0\ X0)))\ (\lambda X1 : \iota . r1\_abian\ X1\ X0)\ (\lambda X1 : \iota . X1)) \tag{1}$$

Assume the following.

$$\forall X0.(k9\_xtuple\_0\ (k2\_ordinal6\ X0) = k1\_ordinal6\ X0) \wedge (k10\_xtuple\_0\ (k2\_ordinal6\ X0) = k2\_ordinal1\ X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ (k2\_ordinal6\ X0)) \wedge ((v1\_funct\_1\ (k2\_ordinal6\ X0)) \wedge ((v5\_ordinal1\ (k2\_ordinal6\ X0)) \wedge (v1\_ordinal2\ (k2\_ordinal6\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge ((v5\_ordinal1\ X0) \wedge (v1\_ordinal2\ X0)))) \Rightarrow (k3\_ordinal6\ X0 = k2\_ordinal6\ (ReplSep\ (toset\ (\lambda X1 : \iota . m1\_subset\_1\ X1\ (k9\_xtuple\_0\ X0)))\ (\lambda X1 : \iota . r1\_abian\ X1\ X0)\ (\lambda X1 : \iota . X1))) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.(X1 = k10\_xtuple\_0\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X3 \in k9\_xtuple\_0\ X0) \wedge (X2 = k1\_funct\_1\ X0\ X3)))) \tag{5}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge((v5\_ordinal1\ X1)\wedge(v1\_ordinal2\ X1))))\Rightarrow((X0 \in k9\_xtuple\_0\ (k3\_ordinal6\ X1))\Rightarrow(r1\_abian\ (k1\_funct\_1\ (k3\_ordinal6\ X1)\ X0)\ X1))$$