

t7_dtconstr (TMMYiesVjFmehvnccJpUdCpYrm- CARPHuVA2)

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Let $k11_mcart_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k12_mcart_1 : \iota \Rightarrow \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$k5_complex1 = k1_xboole_0 \tag{1}$$

Assume the following.

$$\forall X0.(v1_relat_1 (k4_afinsq_1 X0)) \wedge ((v5_relat_1 (k4_afinsq_1 X0) X0) \wedge ((v5_ordinal1 (k4_afinsq_1 X0) X0) \wedge ((v1_funct_1 (k4_afinsq_1 X0) X0) \wedge ((v1_xboole_0 (k4_afinsq_1 X0) X0) \wedge (v1_finset_1 (k4_afinsq_1 X0))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_xboole_0 (k9_xtuple_0 X0)) \tag{3}$$

Assume the following.

$$\forall X0.k4_afinsq_1 X0 = k1_xboole_0 \tag{4}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \tag{5}$$

Assume the following.

$$\forall X0.(((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = k12_mcart_1 X0) \Leftrightarrow ((k9_xtuple_0 X1 = k9_xtuple_0 X0) \wedge (\forall X2.(X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 X1 X2 = k2_xtuple_0 (k1_funct_1 X0 X2)))))))))) \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ & v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = k11_mcart_1 X0) \Leftrightarrow ((k9_xtuple_0 \\ & X1 = k9_xtuple_0 X0) \wedge (\forall X2.(X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 \\ & X1 X2 = k1_xtuple_0 (k1_funct_1 X0 X2)))))) \end{aligned} \quad (7)$$

Theorem 1

$$(k11_mcart_1 k1_xboole_0 = k1_xboole_0) \wedge (k12_mcart_1 k1_xboole_0 = k1_xboole_0)$$