

t25_classes2

(TMZ94HuWhYaxd4nnKhEx2k8QhpnZpHr25o)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_classes1 : \iota \Rightarrow o$ be given. Let $k2_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k4_classes1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v4_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. ((X0 \ k1_xboole_0) \wedge ((\forall X1. (v3_ordinal1 \\ & X1) \Rightarrow ((X0 \ X1) \Rightarrow (X0 \ (k1_ordinal1 \ X1)))) \wedge (\forall X1. (v3_ordinal1 \\ & X1) \Rightarrow (((v4_ordinal1 \ X1) \wedge (\forall X2. (v3_ordinal1 \ X2) \Rightarrow ((X2 \in X1) \Rightarrow \\ & (X0 \ X2)))) \Rightarrow ((X1 = k1_xboole_0) \vee (X0 \ X1)))))) \Rightarrow (\forall X1. (v3_ordinal1 \\ & X1) \Rightarrow (X0 \ X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v3_ordinal1 \ X0) \Rightarrow (((v4_ordinal1 \ X0) \wedge (\forall X1. \\ & (v3_ordinal1 \ X1) \Rightarrow ((X1 \in X0) \Rightarrow (\forall X2. ((v2_classes1 \ X2) \wedge (X1 \in \\ & k2_ordinal1 \ X2)) \Rightarrow ((k1_card_1 \ (k4_classes1 \ X1) \in k1_card_1 \ X2) \wedge \\ & (k4_classes1 \ X1 \in X2)))))) \Rightarrow ((X0 = k1_xboole_0) \vee (\forall X1. ((\\ & v2_classes1 \ X1) \wedge (X0 \in k2_ordinal1 \ X1)) \Rightarrow ((k1_card_1 \ (k4_classes1 \\ & X0) \in k1_card_1 \ X1) \wedge (k4_classes1 \ X0 \in X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v3_ordinal1 \ X0) \Rightarrow ((\forall X1. ((v2_classes1 \ X1) \wedge \\ & (X0 \in k2_ordinal1 \ X1)) \Rightarrow ((k1_card_1 \ (k4_classes1 \ X0) \in k1_card_1 \\ & X1) \wedge (k4_classes1 \ X0 \in X1))) \Rightarrow (\forall X1. ((v2_classes1 \ X1) \wedge (k1_ordinal1 \\ & X0 \in k2_ordinal1 \ X1)) \Rightarrow ((k1_card_1 \ (k4_classes1 \ (k1_ordinal1 \ X0)) \in \\ & k1_card_1 \ X1) \wedge (k4_classes1 \ (k1_ordinal1 \ X0) \in X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2_classes1 \ X0) \wedge (k1_xboole_0 \in k2_ordinal1 \ X0)) \Rightarrow \\ & ((k1_card_1 \ (k4_classes1 \ k1_xboole_0) \in k1_card_1 \ X0) \wedge (k4_classes1 \\ & k1_xboole_0 \in X0)) \end{aligned} \quad (4)$$

Theorem 1

$$\forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.((v2_classes1\ X1) \wedge (X0 \in k2_ordinal1\ X1)) \Rightarrow ((k1_card_1\ (k4_classes1\ X0) \in k1_card_1\ X1) \wedge (k4_classes1\ X0 \in X1)))$$