l27_classes2 (TMMGQdVZNCNoiPYAMtmdbaC-QpXQ73TWFiE5)

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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 $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k9\_setfam\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_classes1 : \iota \Rightarrow o$ be given. Let $r2\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v2\_classes1\ X0) \Rightarrow (k2\_ordinal1\ X0 = k1\_card\_1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (k4\_classes1\ (k1\_ordinal1\ X0) = k9\_setfam\_1\ (k4\_classes1\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X0 \in k1\_ordinal1\ X1) \Leftrightarrow (r1\_ordinal1\ X0\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_classes1\ X0) \wedge (X1 \in X0)) \Rightarrow ((\neg r2\_tarski\ X1\ X0) \wedge (k1\_card\_1\ X1 \in k1\_card\_1\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(v2\_classes1\ X0) \Leftrightarrow ((v1\_classes1\ X0) \wedge ((\forall X1.(X1 \in X0) \Rightarrow (k9\_setfam\_1\ X1 \in X0)) \wedge (\forall X1.((r1\_tarski\ X1\ X0) \wedge (k1\_card\_1\ X1 \in k1\_card\_1\ X0)) \Rightarrow (X1 \in X0)))) \tag{5}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((r1\_ordinal1\ X0\ X1) \vee (X1 \in X0))) \tag{6}$$

Assume the following.

$$\forall X0.v1\_card\_1\ (k1\_card\_1\ X0) \tag{7}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (v3\_ordinal1\ X0) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \tag{10}$$

Theorem 1

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((\forall X1.((v2\_classes1\ X1) \wedge (X0 \in k2\_ordinal1\ X1)) \Rightarrow ((k1\_card\_1\ (k4\_classes1\ X0) \in k1\_card\_1\ X1) \wedge (k4\_classes1\ X0 \in X1))) \Rightarrow (\forall X1.((v2\_classes1\ X1) \wedge (k1\_ordinal1\ X0 \in k2\_ordinal1\ X1)) \Rightarrow ((k1\_card\_1\ (k4\_classes1\ (k1\_ordinal1\ X0)) \in k1\_card\_1\ X1) \wedge (k4\_classes1\ (k1\_ordinal1\ X0) \in X1))))$$