

# t58\_classes2 (TMT- nVsQieDk6QV7iQByuTKS8mgG8d6MbAqL)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes2 : \iota \Rightarrow o$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_classes1 : \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $v1\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v2\_classes1 X0) \wedge ((X1 \in X0) \wedge (X2 \in X0))) \Rightarrow ((k1\_tarski X1 \in X0) \wedge (k2\_tarski X1 X2 \in X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_classes2 X0) \Rightarrow ((v1\_ordinal1 X0) \wedge (v2\_classes1 X0)) \quad (3)$$

## Theorem 1

$$\forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 X2) \wedge (v1\_classes2 X2)) \Rightarrow (((X0 \in X2) \wedge (X1 \in X2)) \Rightarrow ((k2\_tarski X0 X1 \in X2) \wedge (k4\_tarski X0 X1 \in X2)))$$