

# t13\_qmax\_1

## (TMPPzmkiyCyZsMjbcqtTwdrETjJEh5CCfqE)

October 27, 2020

Let  $v2\_qmax\_1 : \iota \Rightarrow o$  be given. Let  $l1\_qmax\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_qmax\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_qmax\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_qmax\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2\_qmax\_1 X0) \wedge (l1\_qmax\_1 X0)) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k5\_qmax\_1 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\ & (k1\_zfmisc\_1 (k5\_qmax\_1 X0))) \Rightarrow (((X1 \in k8\_eqrel\_1 (k5\_qmax\_1 X0) \\ & (k9\_qmax\_1 X0)) \wedge (X2 \in k8\_eqrel\_1 (k5\_qmax\_1 X0) (k9\_qmax\_1 X0))) \Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 (k5\_qmax\_1 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 \\ & X4 (k5\_qmax\_1 X0)) \Rightarrow (((X3 \in X1) \wedge ((X4 \in X1) \wedge (k8\_qmax\_1 X0 X3 \in X2))) \Rightarrow \\ & (k8\_qmax\_1 X0 X4 \in X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (((v2\_qmax\_1 X0) \wedge (l1\_qmax\_1 X0)) \wedge (m1\_subset\_1 X1 (k5\_qmax\_1 X0))) \Rightarrow (k8\_qmax\_1 X0 (k8\_qmax\_1 X0 X1) = X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (((v2\_qmax\_1 X0) \wedge (l1\_qmax\_1 X0)) \wedge (m1\_subset\_1 X1 (k5\_qmax\_1 X0))) \Rightarrow (m1\_subset\_1 (k8\_qmax\_1 X0 X1) (k5\_qmax\_1 X0)) \quad (3)$$

### Theorem 1

$$\begin{aligned} & \forall X0.((v2\_qmax\_1 X0) \wedge (l1\_qmax\_1 X0)) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k5\_qmax\_1 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\ & (k1\_zfmisc\_1 (k5\_qmax\_1 X0))) \Rightarrow (((X1 \in k8\_eqrel\_1 (k5\_qmax\_1 X0) \\ & (k9\_qmax\_1 X0)) \wedge (X2 \in k8\_eqrel\_1 (k5\_qmax\_1 X0) (k9\_qmax\_1 X0))) \Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 (k5\_qmax\_1 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 \\ & X4 (k5\_qmax\_1 X0)) \Rightarrow (((k8\_qmax\_1 X0 X3 \in X2) \wedge ((k8\_qmax\_1 X0 X4 \in X2) \wedge \\ & (X3 \in X1))) \Rightarrow (X4 \in X1)))))) \end{aligned}$$