

t47\_aff\_4

(TMYYBfNbD3v4kPdMyAMSqihrcNEoAuTuws2)

October 27, 2020

Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_diraf : \iota \Rightarrow o$  be given. Let  $l1\_analoaf : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_aff\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_aff\_4 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & \quad X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & \quad X3 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\neg(X1 \in X2) \wedge ((X1 \in X3) \wedge ((v1\_aff\_1 \\ & \quad X2 X0) \wedge ((v1\_aff\_1 X3 X0) \wedge (\forall X4.(m1\_subset\_1 X4 (k1\_zfmisc\_1 \\ & \quad (u1\_struct\_0 X0))) \Rightarrow (\neg(r1\_tarski X2 X4) \wedge ((r1\_tarski X3 X4) \wedge (v1\_aff\_4 \\ & \quad X4 X0))))))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & ((r2\_aff\_4 X0 X1 X2 X3) \Leftrightarrow (\exists X4.(m1\_subset\_1 X4 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0))) \wedge ((r1\_tarski X1 X4) \wedge ((r1\_tarski X2 X4) \wedge ((r1\_tarski \\ & \quad X3 X4) \wedge (v1\_aff\_4 X4 X0)))))))))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & \quad X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & \quad X3 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((X1 \in X2) \wedge ((X1 \in X3) \wedge ((v1\_aff\_1 \\ & \quad X2 X0) \wedge (v1\_aff\_1 X3 X0)))) \Rightarrow ((r2\_aff\_4 X0 X2 X3 X3) \wedge ((r2\_aff\_4 X0 \\ & \quad X3 X2 X3) \wedge (r2\_aff\_4 X0 X3 X3 X2)))))) \end{aligned}$$