

# t16\_substut1 (TMTaESULdAwpFY- hDdZ6NPrrFWj2r94acmFy)

October 27, 2020

Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k16\_substut1 : \iota \Rightarrow \iota$  be given. Let  $k27\_substut1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k20\_substut1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v5\_substut1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. ((m1\_qc\_lang1 X0) \wedge (m1\_subset\_1 X1 (k16\_substut1 X0))) \Rightarrow (m1\_subset\_1 (k20\_substut1 X0 X1) (k16\_substut1 X0)) \quad (1)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k16\_substut1 X0)) \Rightarrow ((v5\_substut1 X1 X0) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k16\_substut1 X0)) \Rightarrow ((X2 = k27\_substut1 X0 X1) \Leftrightarrow (X1 = k20\_substut1 X0 X2)))))) \quad (2)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k16\_substut1 X0)) \Rightarrow ((v5\_substut1 X1 X0) \Leftrightarrow (\exists X2. (m1\_subset\_1 X2 (k16\_substut1 X0)) \wedge (X1 = k20\_substut1 X0 X2)))))) \quad (3)$$

## Theorem 1

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k16\_substut1 X0)) \Rightarrow (k27\_substut1 X0 (k20\_substut1 X0 X1) = X1))$$