

# t21\_heyting2 (TMQLuDArtLbEfBtEQba- HosowJdMDMsWmToU)

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Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_substlat : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_heyting2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1\_finset\_1 X1) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k4\_partfun1 X0 X1)) \Rightarrow ((v1\_finset\_1 X2) \Rightarrow (k3\_funct\_2 (k4\_partfun1 \\ & X0 X1) (u1\_struct\_0 (k5\_substlat X0 X1)) (k8\_heyting2 X0 X1) X2 = \\ & k1\_tarski X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{2}$$

## Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (v1\_finset\_1 X1) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k4\_partfun1 X0 X1)) \Rightarrow ((v1\_finset\_1 X2) \Rightarrow (\forall X3. (X3 \in k3\_funct\_2 \\ & (k4\_partfun1 X0 X1) (u1\_struct\_0 (k5\_substlat X0 X1)) (k8\_heyting2 \\ & X0 X1) X2) \Rightarrow (X3 = X2)))) \end{aligned}$$