# t17_sgraph1 (TMFoWMEN-WHgCwSWv84VqzXFjLJhzxmhbZoa)

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Let $k3\_sgraph1 : \iota \Rightarrow \iota$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_sgraph1 : \iota \Rightarrow \iota$ be given. Let $g1\_sgraph1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.k3\_sgraph1\ X0 = ReplSep2\ (toset\ (\lambda X1 : \iota.(v1\_finset\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\ (\lambda X1 : \iota.toset\ (\lambda X2 : \iota.(v1\_finset\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_sgraph1\ X1)))))\ (\lambda X1 : \iota.\lambda X2 : \iota.True)\ (\lambda X1 : \iota.\lambda X2 : \iota.\ g1\_sgraph1\ X1\ X2) \tag{1}$$

**Theorem 1**

$$\forall X0.\forall X1.(X1 \in k3\_sgraph1\ X0) \Leftrightarrow (\exists X2.((v1\_finset\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))) \wedge (\exists X3.((v1\_finset\_1\ X3) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_sgraph1\ X2)))) \wedge (X1 = g1\_sgraph1\ X2\ X3)))$$