

# t17\_graph\_5 (TMdXCdfT- sqUDcr916TL8EpzDmEnUpmraUxD)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_graph\_1 : \iota \Rightarrow o$  be given. Let  $v7\_graph\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_graph\_4 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_graph\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v3\_graph\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_graph\_1 X0)) \Rightarrow (\forall X1. \\ & ((v7\_graph\_1 X1 X0) \wedge ((v3\_graph\_2 X1 X0) \wedge (m2\_graph\_1 X1 X0))) \Rightarrow \\ & ((v2\_funct\_1 X1) \wedge ((v7\_graph\_1 X1 X0) \wedge (m2\_graph\_1 X1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_graph\_1 X0)) \Rightarrow (\forall X1. \\ & ((v7\_graph\_1 X1 X0) \wedge ((v1\_graph\_4 X1 X0) \wedge (m2\_graph\_1 X1 X0))) \Rightarrow \\ & ((v7\_graph\_1 X1 X0) \wedge ((v3\_graph\_2 X1 X0) \wedge (m2\_graph\_1 X1 X0)))) \end{aligned} \quad (2)$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_graph\_1 X0)) \Rightarrow (\forall X1. \\ & ((v7\_graph\_1 X1 X0) \wedge ((v1\_graph\_4 X1 X0) \wedge (m2\_graph\_1 X1 X0))) \Rightarrow \\ & (v2\_funct\_1 X1)) \end{aligned}$$