

t10\_binop\_2  
(TMY5BWRCfwSdHqnyQkJX1K73kCubBR4H3j1)

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Let  $k4\_binop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k48\_binop\_2 : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r3\_binop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_1) \wedge (m2\_subset\_1\ np\_1\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_1\ k1\_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$r3\_binop\_1\ k5\_numbers\ np\_1\ k48\_binop\_2 \quad (2)$$

Assume the following.

$$\begin{aligned} & (v1\_funct\_1\ k48\_binop\_2) \wedge ((v1\_funct\_2\ k48\_binop\_2\ (k2\_zfmisc\_1 \\ & k5\_numbers\ k5\_numbers)\ k5\_numbers) \wedge (m1\_subset\_1\ k48\_binop\_2 \\ & (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k5\_numbers) \\ & k5\_numbers)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ (k2\_zfmisc\_1 \\ & X0\ X0)\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & X0\ X0)\ X0)))))) \Rightarrow ((\exists X2.(m1\_subset\_1\ X2\ X0) \wedge (r3\_binop\_1\ X0 \\ & X2\ X1)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow ((X2 = k4\_binop\_1\ X0\ X1) \Leftrightarrow \\ & (r3\_binop\_1\ X0\ X2\ X1)))) \end{aligned} \quad (4)$$

**Theorem 1**  $k4\_binop\_1\ k5\_numbers\ k48\_binop\_2 = np\_1$ .