

# t58\_funct\_8 (TMQUCKGT- mvzwZ4F5NGRKhBVCzTkm2xNTFG)

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Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_funct\_8 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_absvalue : \iota \Rightarrow \iota$  be given. Let  $k1\_absvalue : \iota \Rightarrow \iota$  be given. Let  $c5\_xreal\_0 : \iota$  be given. Let  $k1\_arytm\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $c3\_xreal\_0 : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $c2\_topalg\_3 : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$(m2\_subset\_1\ np\_0\ k1\_numbers\ k5\_numbers) \wedge ((m1\_subset\_1\ np\_0\ k5\_numbers) \wedge (m1\_subset\_1\ np\_0\ k1\_numbers)) \quad (1)$$

Assume the following.

$$k2\_xcmplx\_0\ np\_1\ (k4\_xcmplx\_0\ np\_1) = np\_0 \quad (2)$$

Assume the following.

$$r1\_xxreal\_0\ np\_0\ np\_0 \quad (3)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (k2\_absvalue\ X0 = k1\_absvalue\ X0) \quad (4)$$

Assume the following.

$$(c5\_xreal\_0 = k4\_xcmplx\_0\ np\_1) \wedge (k1\_arytm\_0\ c3\_xreal\_0\ c5\_xreal\_0 = k6\_numbers) \quad (5)$$

Assume the following.

$$k2\_xcmplx\_0\ np\_1\ (k4\_xcmplx\_0\ np\_1) = k6\_numbers \quad (6)$$

Assume the following.

$$(v1\_funct\_1\ k1\_funct\_8) \wedge ((v1\_funct\_2\ k1\_funct\_8\ k1\_numbers\ k1\_numbers) \wedge (m1\_subset\_1\ k1\_funct\_8\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))) \quad (7)$$

Assume the following.

$$c2\_topalg\_3 = k6\_numbers \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ k1\_numbers\ k1\_numbers) \wedge \\ & (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))))) \Rightarrow \\ & ((X0 = k1\_funct\_8) \Leftrightarrow (\forall X1. (m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow ( \\ & k3\_funct\_2\ k1\_numbers\ k1\_numbers\ X0\ X1 = k2\_absvalue\ X1))) \quad (9) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1\_xreal\_0\ X0) \Rightarrow (((\neg r1\_xxreal\_0\ X0\ k6\_numbers) \Rightarrow ( \\ & k1\_absvalue\ X0 = np\_1)) \wedge (((\neg r1\_xxreal\_0\ k6\_numbers\ X0) \Rightarrow (k1\_absvalue \\ & X0 = k1\_real\_1\ np\_1)) \wedge (((r1\_xxreal\_0\ X0\ k6\_numbers) \wedge (r1\_xxreal\_0 \\ & k6\_numbers\ X0)) \Rightarrow (k1\_absvalue\ X0 = k6\_numbers)))) \quad (10) \end{aligned}$$

Assume the following.

$$\forall X0. (m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \quad (11)$$

**Theorem 1**  $k3\_funct\_2\ k1\_numbers\ k1\_numbers\ k1\_funct\_8\ k6\_numbers = k6\_numbers$ .