

# t9\_turing\_1 (TMJQnHhMAFHG- wXP66xRNDDcCazcHDwo3MAU)

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Let  $l1\_turing\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u2\_turing\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_numbers : \iota$  be given. Let  $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_turing\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_turing\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k9\_turing\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  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  $k5\_numbers : \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$v1\_xboole\_0 np\_0 \quad (3)$$

Assume the following.

$$k2\_xcmplx\_0 np\_0 np\_1 = np\_1 \quad (4)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (m1\_subset\_1 X1 k5\_numbers)) \Rightarrow \\ & (k1\_nat\_1 X0 X1 = k2\_xcmplx\_0 X0 X1) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1\_turing\_1 X0) \wedge (m1\_subset\_1 X1 (k3\_zfmisc\_1 \\ & (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 k4\_numbers (u1\_turing\_1 \\ & X0)))) \Rightarrow ((v1\_funct\_1 (k10\_turing\_1 X0 X1) \wedge ((v1\_funct\_2 (k10\_turing\_1 \\ & X0 X1) k5\_numbers (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 \\ & k4\_numbers (u1\_turing\_1 X0)))) \wedge (m1\_subset\_1 (k10\_turing\_1 X0 \\ & X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k3\_zfmisc\_1 (u2\_turing\_1 \\ & X0) k4\_numbers (k9\_funct\_2 k4\_numbers (u1\_turing\_1 X0)))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1\_turing\_1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k3\_zfmisc\_1 \\ & (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 k4\_numbers (u1\_turing\_1 \\ & X0)))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 k5\_numbers \\ & (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 k4\_numbers \\ & (u1\_turing\_1 X0)))) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 \\ & k4\_numbers (u1\_turing\_1 X0)))))) \Rightarrow ((X2 = k10\_turing\_1 X0 X1) \Leftrightarrow \\ & ((k8\_nat\_1 (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 \\ & k4\_numbers (u1\_turing\_1 X0))) X2 k6\_numbers = X1) \wedge (\forall X3. \\ & (v7\_ordinal1 X3) \Rightarrow (k8\_nat\_1 (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers \\ & (k9\_funct\_2 k4\_numbers (u1\_turing\_1 X0))) X2 (k1\_nat\_1 X3 np\_1) = \\ & k9\_turing\_1 X0 (k8\_nat\_1 (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers \\ & (k9\_funct\_2 k4\_numbers (u1\_turing\_1 X0))) X2 X3)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (v7\_ordinal1 X0) \quad (9)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (l1\_turing\_1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k3\_zfmisc\_1 \\ & (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 k4\_numbers (u1\_turing\_1 \\ & X0)))) \Rightarrow (k8\_nat\_1 (k3\_zfmisc\_1 (u2\_turing\_1 X0) k4\_numbers (k9\_funct\_2 \\ & k4\_numbers (u1\_turing\_1 X0))) (k10\_turing\_1 X0 X1) np\_1 = k9\_turing\_1 \\ & X0 X1)) \end{aligned}$$