

t9\_ami\_wstd  
(TMcEtZ5oi6y5jzLetU9DQm2FnT2cZKYErZt)

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Let  $v1\_setfam\_1 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_ami\_wstd : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_ami\_wstd : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_ami\_wstd : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_ami\_wstd : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k2\_ami\_wstd : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v3\_xxreal\_2 : \iota \Rightarrow o$  be given. Let  $v4\_xxreal\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_setfam\_1 X0) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge \\ & ((v2\_memstr\_0 X1 X0) \wedge ((v3\_memstr\_0 X1 X0) \wedge ((v2\_ami\_wstd X1 X0) \wedge \\ & (l1\_extpro\_1 X1 X0)))))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow (\forall X3. \\ & (v7\_ordinal1 X3) \Rightarrow ((r1\_ami\_wstd X0 X1 (k1\_ami\_wstd X0 X1 X2) (k1\_ami\_wstd \\ & X0 X1 X3)) \Leftrightarrow (r1\_xxreal\_0 X2 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ & X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1\_setfam\_1 X0) \wedge (((\neg v2\_struct\_0 \\ & X1) \wedge ((v2\_memstr\_0 X1 X0) \wedge ((v3\_memstr\_0 X1 X0) \wedge ((v2\_ami\_wstd \\ & X1 X0) \wedge (l1\_extpro\_1 X1 X0)))))) \wedge (v7\_ordinal1 X2)) \Rightarrow (k3\_ami\_wstd \\ & X0 X1 X2 = k2\_ami\_wstd X0 X1 X2) \end{aligned} \tag{4}$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (5)$$

Assume the following.

$$v6\_membered k4\_ordinal1 \quad (6)$$

Assume the following.

$$(\neg v3\_xxreal\_2 k1\_numbers) \wedge (\neg v4\_xxreal\_2 k1\_numbers) \quad (7)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((\neg v1\_setfam\_1 X0) \wedge (((\neg v2\_struct\_0 \\ X1) \wedge ((v2\_memstr\_0 X1 X0) \wedge ((v3\_memstr\_0 X1 X0) \wedge ((v2\_ami\_wstd \\ X1 X0) \wedge (l1\_extpro\_1 X1 X0)))))) \wedge (v7\_ordinal1 X2))) \Rightarrow (v7\_ordinal1 \\ (k2\_ami\_wstd X0 X1 X2)) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_setfam\_1 X0) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge \\ ((v2\_memstr\_0 X1 X0) \wedge ((v3\_memstr\_0 X1 X0) \wedge ((v2\_ami\_wstd X1 X0) \wedge \\ (l1\_extpro\_1 X1 X0)))))) \Rightarrow (\forall X2. (v7\_ordinal1 X2) \Rightarrow (\forall X3. \\ (v7\_ordinal1 X3) \Rightarrow ((X3 = k2\_ami\_wstd X0 X1 X2) \Leftrightarrow (k1\_ami\_wstd X0 X1 \\ X3 = X2)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0. (v6\_membered X0) \Rightarrow ((v6\_membered X0) \wedge (v3\_xxreal\_2 X0)) \quad (11)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (v6\_membered X0) \quad (12)$$

Assume the following.

$$\forall X0. (v6\_membered X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 X0) \Rightarrow (v7\_ordinal1 X1)) \quad (13)$$

**Theorem 1**

$$\begin{aligned} \forall X0. (\neg v1\_setfam\_1 X0) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge \\ ((v2\_memstr\_0 X1 X0) \wedge ((v3\_memstr\_0 X1 X0) \wedge ((v2\_ami\_wstd X1 X0) \wedge \\ (l1\_extpro\_1 X1 X0)))))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 k1\_numbers \\ k5\_numbers) \Rightarrow (\forall X3. (m2\_subset\_1 X3 k1\_numbers k5\_numbers) \Rightarrow \\ ((r1\_xxreal\_0 (k3\_ami\_wstd X0 X1 X2) (k3\_ami\_wstd X0 X1 X3)) \Leftrightarrow (r1\_ami\_wstd \\ X0 X1 X2 X3)))))) \end{aligned}$$