

t30\_stirl2\_1  
(TMMxzVDtfqa1X25JcXTYcoPgbxha7ixjQj9)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k3\_stirl2\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_stirl2\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_nat\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_stirl2\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_seq\_4 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (k3\_stirl2\_1 X0 X0 = np\_1) \quad (1)$$

Assume the following.

$$\neg v1\_xboole\_0 np\_1 \quad (2)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (3)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow ((v1\_xboole\_0 (k1\_card\_1 X0)) \wedge (v1\_card\_1 (k1\_card\_1 X0))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (k3\_stirl2\_1 \\ X0 X1 = k1\_card\_1 (ReplSep (toset (\lambda X2 : \iota.(v1\_funct\_1 X2)) \wedge \\ ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ X0 X1)))))) (\lambda X2 : \iota.(v2\_funct\_2 X2 X1) \wedge (v1\_stirl2\_1 X2 X0 \\ X1)) (\lambda X2 : \iota.X2)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\forall X2. \\ & ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((v1\_stirl2\_1 X2 X0 X1) \Leftrightarrow (((X0 = k6\_numbers) \Rightarrow \\ & (X1 = k6\_numbers)) \wedge ((X1 = k6\_numbers) \Rightarrow (X0 = k6\_numbers)) \wedge (\forall X3. \\ & (v7\_ordinal1 X3) \Rightarrow (\forall X4.(v7\_ordinal1 X4) \Rightarrow (\neg(X3 \in k2\_relset\_1 \\ & X1 X2) \wedge ((X4 \in k2\_relset\_1 X1 X2) \wedge ((\neg r1\_xxreal\_0 X4 X3) \wedge (r1\_xxreal\_0 \\ & (k5\_nat\_1 (k1\_stirl2\_1 X0 X1 X2 (k1\_seq\_4 X4))) (k5\_nat\_1 (k1\_stirl2\_1 \\ & X0 X1 X2 (k1\_seq\_4 X3)))))))))))))) \end{aligned} \quad (8)$$

Assume the following.

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

**Theorem 1**

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((k3\_stirl2\_1 X0 k6\_numbers = np\_1) \Leftrightarrow (X0 = k6\_numbers))$$