

t19_afinsq_1 (TMZQR- CxGGz8cdDUbgoF5m2QyaXngN7Tgkeg)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k1_ordinal4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((\\ v5_ordinal1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow (\forall X2. \\ ((v1_relat_1 X2) \wedge ((v5_ordinal1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finset_1 \\ X2)))) \Rightarrow ((r1_xxreal_0 (k1_afinsq_1 X1) X0) \Rightarrow ((r1_xxreal_0 (k2_nat_1 \\ (k1_afinsq_1 X1) (k1_afinsq_1 X2)) X0) \vee (k1_funct_1 (k1_ordinal4 \\ X1 X2) X0 = k1_funct_1 X2 (k6_xcmplx_0 X0 (k1_afinsq_1 X1))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v5_ordinal1 X0) \wedge ((v1_funct_1 \\ X0) \wedge (v1_finset_1 X0)))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v5_ordinal1 \\ X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow (k1_afinsq_1 (k1_ordinal4 \\ X0 X1) = k2_nat_1 (k1_afinsq_1 X0) (k1_afinsq_1 X1))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((\\ v5_ordinal1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow (\forall X2. \\ ((v1_relat_1 X2) \wedge ((v5_ordinal1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finset_1 \\ X2)))) \Rightarrow ((r1_xxreal_0 (k1_afinsq_1 X1) X0) \Rightarrow ((r1_xxreal_0 (k1_afinsq_1 \\ (k1_ordinal4 X1 X2)) X0) \vee (k1_funct_1 (k1_ordinal4 X1 X2) X0 = k1_funct_1 \\ X2 (k6_xcmplx_0 X0 (k1_afinsq_1 X1))))))) \end{aligned}$$