t1_pcomps_2 (TM-MVN3SxDQk8gqkARsYfp84pow9oPqmp1VK)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $r2\_wellord1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_wellord1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_wellord1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow ((r2\_wellord1\ X0\ (k1\_relat\_1\ X0)) \Leftrightarrow (v2\_wellord1\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((r2\_wellord1\ X1\ X0) \Rightarrow ((k1\_relat\_1\ (k2\_wellord1\ X1\ X0) = X0) \wedge (v2\_wellord1\ (k2\_wellord1\ X1\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X0) \Rightarrow (v1\_relat\_1\ (k2\_wellord1\ X0\ X1)) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.(r2\_wellord1\ X0\ X1) \Rightarrow ((r2\_wellord1\ (k2\_wellord1\ X0\ X1)\ X1) \wedge (X1 = k1\_relat\_1\ (k2\_wellord1\ X0\ X1))))$$