1:	$\exists x.\forall y.((R(y,x)\to\neg\exists z.(R(y,z)\wedge R(z,y)))\wedge(\neg\exists z.(R(y,z)\wedge R(z,y))\to R(y,x)))$	assumption
2:	actual , $\forall y.((R(y,i)\to\neg\exists z.(R(y,z)\wedge R(z,y)))\wedge(\neg\exists z.(R(y,z)\wedge R(z,y))\to R(y,i)))$	assumptions
3:	$(R(i,i)\to\neg\exists z.(R(i,z)\wedge R(z,i)))\wedge(\neg\exists z.(R(i,z)\wedge R(z,i))\to R(i,i))$	∀ elim 2.2,2.1
4:	$\neg\exists z.(R(i,z)\wedge R(z,i))\to R(i,i)$	∧ elim 3
5:	$R(i,i)\to\neg\exists z.(R(i,z)\wedge R(z,i))$	∧ elim 3
6:	$\exists z.(R(i,z)\wedge R(z,i))$	assumption
7:	actual i1, $R(i,i1)\wedge R(i1,i)$	assumptions
8:	$R(i,i1)$	∧ elim 7.2
9:	$R(i1,i)$	∧ elim 7.2
10:	$R(i1,i)\wedge R(i,i1)$	∧ intro 9,8
11:	$(R(i1,i)\to\neg\exists z.(R(i1,z)\wedge R(z,i1)))\wedge(\neg\exists z.(R(i1,z)\wedge R(z,i1))\to R(i1,i)$	∀ elim 2.2,7.1
12:	$\neg\exists z.(R(i1,z)\wedge R(z,i1))\to R(i1,i)$	∧ elim 11
13:	$R(i1,i)\to\neg\exists z.(R(i1,z)\wedge R(z,i1))$	∧ elim 11
14:	$\neg\exists z.(R(i1,z)\wedge R(z,i1))$	→ elim 13,9
15:	$\exists z.(R(i1,z)\wedge R(z,i1))$	∃ intro 10,2.1
16:	$\bot$	¬ elim 15,14
17:	$\bot$	∃ elim 6,7-16
18:	$\neg\exists z.(R(i,z)\wedge R(z,i))$	¬ intro 6-17
19:	$R(i,i)$	→ elim 4,18
20:	$\neg\exists z.(R(i,z)\wedge R(z,i))$	→ elim 5,19
21:	$R(i,i)\wedge R(i,i)$	∧ intro 19,19
22:	$\exists z.(R(i,z)\wedge R(z,i))$	∃ intro 21,2.1
23:	$\bot$	¬ elim 22,20
24:	$R(i,i)$	→ elim 4,20
25:	$\bot$	hyp 23
26:	$\bot$	∃ elim 1,2-25
27:	$\neg\exists x.\forall y.((R(y,x)\to\neg\exists z.(R(y,z)\wedge R(z,y)))\wedge(\neg\exists z.(R(y,z)\wedge R(z,y))\to R(y,x)))$	¬ intro 1-26