```
(1)
                                \neg(\exists x\exists y\;p(x,y))\longleftrightarrow\exists y\exists x\;p(x,y)
                                                                                                                              ريشه
                               \exists x \exists y \ p(x,y)
                                                                           \neg \exists x \exists y \ p(x,y)
(٢)
                             \neg(\exists x \exists y p(x,y)) 
\exists y p(a_1,y)
                                                                            \exists y \exists x \ p(x,y)\exists x \ p(x,a_2)
(٣)
                                                                                                                              Y T \exists جدید و a_1\in C: ۳ T \exists جدید و a_2\in C ۴ T \exists جدید و a_1\in C
(4)
(۵)
                                  p(a_1, a_2)
                                                                               p(a_1, a_2)
                                                                                                                              r F \exists: r F \exists
(۶)
                               \neg \exists x \ p(x, a_2)
                                                                              \neg \exists p(a_1, y)
                                                                              \neg p(a_1, a_2)
\otimes
\diamond
                                                                                                                              ۶ F∃
(V)
                                 \neg p(a_1, a_2)
                                        ۷و۵
```