序号	公式	规则
(1)	$m{q} o (m{p} o m{q})$	L1
(2)	$m{p} ightarrow (m{q} ightarrow m{r})$	假定
(3)	$(oldsymbol{p} ightarrow (oldsymbol{q} ightarrow (oldsymbol{q} ightarrow (oldsymbol{p} ightarrow (oldsymbol{q} $	L1
(4)	$m{q} ightarrow (m{p} ightarrow (m{q} ightarrow m{r}))$	(2), (3), MP
(5)	$(oldsymbol{p} ightarrow (oldsymbol{q} ightarrow oldsymbol{r})) ightarrow ((oldsymbol{p} ightarrow oldsymbol{q}) ightarrow (oldsymbol{p} ightarrow oldsymbol{r}))$	L2
(6)	$((m{p} ightarrow (m{q} ightarrow m{r})) ightarrow ((m{p} ightarrow m{q}) ightarrow (m{p} ightarrow m{r}))) ightarrow (m{q} ightarrow ((m{p} ightarrow (m{q} ightarrow m{r})) ightarrow ((m{p} ightarrow m{q}) ightarrow ((m{p} ightarrow m{q}) $	L1
(7)	$oldsymbol{q} ightarrow ((oldsymbol{p} ightarrow (oldsymbol{p} ightarrow oldsymbol{r})) ightarrow ((oldsymbol{p} ightarrow oldsymbol{q}) ightarrow ((oldsymbol{p} ightarrow oldsymbol{q}) ightarrow ((oldsymbol{p} ightarrow oldsymbol{r})))$	(5), (6), MP
(8)	$(\boldsymbol{q} \rightarrow ((\boldsymbol{p} \rightarrow (\boldsymbol{q} \rightarrow \boldsymbol{r})) \rightarrow ((\boldsymbol{p} \rightarrow \boldsymbol{q}) \rightarrow (\boldsymbol{p} \rightarrow \boldsymbol{r})))) \rightarrow ((\boldsymbol{q} \rightarrow (\boldsymbol{p} \rightarrow (\boldsymbol{q} \rightarrow \boldsymbol{r}))) \rightarrow (\boldsymbol{q} \rightarrow ((\boldsymbol{p} \rightarrow \boldsymbol{q}) \rightarrow (\boldsymbol{p} \rightarrow \boldsymbol{r}))))$	L2
(9)	$(oldsymbol{q} ightarrow (oldsymbol{p} ightarrow (oldsymbol{p} ightarrow (oldsymbol{p} ightarrow (oldsymbol{p} ightarrow oldsymbol{q}))) ightarrow (oldsymbol{q} ightarrow (oldsymbol{q} ightarrow (oldsymbol{p} ightarrow oldsymbol{q})))$	(7), (8), MP
(10)	$m{q} ightarrow ((m{p} ightarrow m{q}) ightarrow (m{p} ightarrow m{r}))$	(4), (9), MP
(11)	$(oldsymbol{q} ightarrow ((oldsymbol{p} ightarrow oldsymbol{q}) ightarrow (oldsymbol{p} ightarrow oldsymbol{r})) ightarrow ((oldsymbol{q} ightarrow (oldsymbol{p} ightarrow oldsymbol{q})) ightarrow ((oldsymbol{p} ightarrow oldsymbol{q})) ightarrow ((oldsymbol{q} ightarrow oldsymbol{q}) ightarrow ((oldsymb$	L2
(12)	$(oldsymbol{q} ightarrow (oldsymbol{p} ightarrow oldsymbol{q})) ightarrow (oldsymbol{q} ightarrow oldsymbol{q}))$	(10), (11), MP
(13)	$m{q} ightarrow (m{p} ightarrow m{r})$	(1), (12), MP