

1.	$\forall x[F(x) \rightarrow G(x)]$	Premise	{1}
2.	$\forall x[G(x) \rightarrow H(x)]$	Premise	{2}
3.	$\forall x[F(x)]$	Hypothesis	{3}
4.	$F(a)$	\forall -elimination3	{3}
5.	$F(a) \rightarrow G(a)$	\forall -elimination1	{1}
6.	$G(a)$	\rightarrow -elimination4,5	{1,3}
7.	$G(a) \rightarrow H(a)$	\forall -elimination2	{2}
8.	$H(a)$	\rightarrow -elimination6,7	{1,2,3}
9.	$\exists x[H(x)]$	\exists -introduction8	{1,2,3}
10.	$\forall x[F(x)] \rightarrow \exists x[H(x)]$	\rightarrow -introduction3,9	{1,2}