1.	∀x[P(x)→(Q(x)∨x=b)]	Premise	{1}
2.	⎡ Q(b)	Hypothesis	{2}
3.	⎢⎡ P(a)	Hypothesis	{3}
4.	⎢⎢ P(a)→(Q(a)∨a=b)	∀-elimination1	{1}
5.	⎢⎢ Q(a)∨a=b	→-elimination3,4	{1,3}
6.	⎢⎢⎡ Q(a)	Hypothesis	{6}
7.	⎢⎢⎣ Q(a)	Restate6	{6}
8.	⎢⎢⎡ a=b	Hypothesis	{8}
9.	⎢⎢⎢ a=a	=-introduction	{}
10.	⎢⎢⎢ b=a	=-elimination8,9	{8}
11.	⎢⎢⎢ Q(b)	Restate2	{2}
12.	⎢⎢⎣ Q(a)	=-elimination10,11	{2,8}
13.	⎢⎣ Q(a)	∨-elimination5,6,7,8,12	{1,2,3}
14.	⎢ P(a)→Q(a)	→-introduction3,13	{1,2}
15.	⎣ ∀x[P(x)→Q(x)]	∀-introduction14	{1,2}
16.	Q(b)→∀x[P(x)→Q(x)]	→-introduction2,20	{1}