

Inference at * 1 1 1 1
of proof for Lemma dep_ax_choice:

1. $A : \text{Type}$
2. $B : A \rightarrow \text{Type}$
3. $Q : x:A \rightarrow B(x) \rightarrow \text{Type}$
4. $g : x:A \rightarrow y:B(x) \times Q(x,y)$
5. $x : A$
6. $y : y:B(x) \times Q(x,y)$
7. $y = g(x)$

 $\vdash Q(x,(g(x)).1)$
by D 6

1:

6. $y_1 : B(x)$
7. $y_2 : Q(x,y_1)$
8. $\langle y_1, y_2 \rangle = g(x)$

 $\vdash Q(x,(g(x)).1)$
.