

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

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

1:

6. $y_1 : B$
7. $y_2 : Q(x,y_1)$
8. $\langle y_1, y_2 \rangle = g(x)$
- $\vdash Q(x,(g(x)).1)$

.