1: $(\text{rev} \cdot \text{rev})x = \text{rev}(\text{rev } x)$ ·

2: $\text{id } x = x$ id

   . . .

3: $\text{rev}(\text{rev } x) = x$

4: $\text{rev}(\text{rev } x) = \text{id } x$ [rewrite] 2,3

5: $(\text{rev} \cdot \text{rev})x = \text{id } x$ [rewrite] 1,4

6: $\text{rev} \cdot \text{rev} = \text{id}$ ext 5