Discrete Math Exam Problem: Composing bijections

Let *A*, *B*, and *C* be arbitrary sets. If $f : A \rightarrow B$ and $g : B \rightarrow C$ are functions, the *composition* $g \circ f : A \rightarrow C$ is the function defined by

$$(g \circ f)(a) = g(f(a)).$$

Prove that if *f* and *g* are bijections, then so is $g \circ f$.

Remember to also upload a short video of yourself explaining your solution. Either visit http://flipgrid.com/hdxdiscrete and choose this problem from the list of problems, or go to the course website and click the FlipGrid logo next to this problem in the course calendar.