Why is $\text{PSL}(2, 7) \cong \text{GL}(3, 2)$?

We construct a straightforward, explicit bijection from the group $\text{PSL}(2, 7)$ onto the group $\text{GL}(3, 2)$. Our proof requires only elementary facts about groups, fields, and matrices. In particular, our proof does not utilize projective geometry, block designs, or simplicity arguments. (Received September 03, 2009)