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24061-0123. *Why is  $PSL(2, 7) \cong GL(3, 2)$ ?*

We construct a straightforward, explicit bijection from the group  $PSL(2, 7)$  onto the group  $GL(3, 2)$ . 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)