1056-17-229 **Murray R Bremner*** (bremner@math.usask.ca), Department of Mathematics and Statistics, University of Saskatchewan, Saskatoon, SK S7N 5E6, Canada, and **Luiz A Peresi**. *Special identities for quasi-Jordan algebras.*

Velasquez and Felipe defined a (right) quasi-Jordan algebra to be a nonassociative algebra satisfying right commutativity $a(bc) = a(cb)$ and the right quasi-Jordan identity $(ba)a^2 = (ba^2)a$. These identities are satisfied by the product $ab = \frac{1}{2}(a \dashv b + b \vdash a)$ in an associative dialgebra with operations $\dashv$ and $\vdash$ over a field of characteristic $\neq 2, 3$. This product also satisfies the associator-derivation identity $(b, a^2, c) = 2(b, a, c)a$. We use computer algebra and the representation theory of the symmetric group to show that there are no new identities for this product in degree ≤ 7, but that six new irreducible identities exist in degree 8. These new identities are quasi-Jordan analogues of the Glennie identities for special Jordan algebras. (Received August 17, 2009)