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Jennifer Paulhus* (paulhus@math.uiuc.edu), Department of Mathematics, University of Illinois, 1409 W Green Street, Urbana, IL 61801. *Isogenous elliptic factors in the Jacobians of curves.*

Given a fixed genus, what is the largest number t of isogenous elliptic curves we can find in the decomposition of the Jacobian of a curve of that genus? We find t for several low genera and discuss possible lower bounds on t for various other genera. The lower bounds are obtained by using the automorphism groups G of the curves and idempotents in $\mathbb{Q}[G]$. (Received September 25, 2006)