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George Street, The College of Charleston, Charleston, SC 29424. *Free Lie algebras and Recursion
relations in generalized Moonshine.*

Borcherds Lie algebras such as the monster and baby monster Lie algebra can have large free subalgebras. We discuss identifying these algebras and computing their denominator identities. These identities can be used to derive recursion formulas for the value of characters of the action of the monster (or baby monster). These relations can then be used to verify the previously known moonshine and one case of generalized moonshine correspondence between characters of the group action on a module and certain modular functions. (Received January 09, 2007)