1043-05-31 Allen J. Schwenk* (schwenk@wmich.edu), Western Michigan University, Kalamazoo, MI 49008. Construction of a Small Regular Graph of Girth 5 and Degree 19.
The smallest orders for regular graphs of girth 5 are known for each degree up to 7 . For higher degree these are harder to find. We give an algebra based construction for degree 19 that is, so far as we know, the smallest constructed to date. (Received July 24, 2008)

