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Allan Berele*, DePaul University, Chicago, IL 60614. *GK dimension of p. i. algebras.*

The GK dimension of an algebra generated by k elements and satisfying a polynomial identity of degree d is bounded by $(k - 1)\lfloor d/2 \rfloor^2 + 1$.

We can prove this statement in characteristic zero under mild hypotheses on k and d , and we can prove a weaker bound without them. We conjecture that it is always true.

We also mention some related questions. (Received August 03, 2015)