1014-52-1575   **Imre Bárány** and **Attila Pór*** (`axp103@case.edu`), 10900 Euclid Avenue, Cleveland, OH
44106-7058. *On a conjecture of Ehrhart.*

Let K be a convex body in the plane whose center of gravity lies at the origin. E. Ehrhart conjectured that if $\text{Area} K \geq 6$ then K contains two antipodal (nonzero) lattice points. Let $M = K \cap -K$ and $g(K) = \frac{\text{Area}_M}{\text{Area}_K}$. Ehrhart's conjecture translates via Minkowski's theorem to $g(K) \geq \frac{2}{3}$. This was proved by Kozinec and Stewart. In this paper we give a new proof to the theorem and show the stability of g. (Received September 28, 2005)