The Annals of Probability
1987, Vol. 15, No. 3, 1230

CORRECTION

ON THE AVERAGE NUMBER OF REAL ROOTS OF A RANDOM ALGEBRAIC EQUATION

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The Annals of Probability (1986) **14** 702–709

In the course of proving that $EN(0,1) \sim (2\pi)^{-1}\log(n/K_n^2)$, it was implicitly assumed [e.g., in inequalities (2.11), (2.15), (2.16)] that $\{K_n\}$ was bounded away from zero. This assumption should therefore be included for that part of the theorem. [We can in fact show that if this assumption is omitted and $\{K_n\}$ is bounded above, then the conclusion is changed to $EN(0,1) \sim (2\pi)^{-1}\log n$, i.e., the formula proved by Kac when $K_n \equiv 0$.]

Other minor corrections are:

1. In its definition and (2.6), β should be $\sum_{i=0}^{n-1} i^2 x^{2i-2}$.
2. β/Δ in (2.14) is $(1-x^2)(1-x^{2n})\{(1-x^{2n})^2 - \cdots\}\cdots$.
3. The right-hand integral 3 lines from the bottom of page 706 should be $\int_0^1$ rather than $\int_1^\infty$.
4. $\log n$ should be replaced by $\log(n/K_n^2)$ 3 lines below (2.17).
5. In the abstract, $O(\sqrt{n})$ should be $o(\sqrt{n})$.

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Received November 1986.