## 11. Solomon W. Golomb: Random permutations.

Let $L_{N}$ be the expected length of the longest cycle in a random permutation on $N$ letters, and let $\lambda_{N}=L_{N} / N$. (Thus, $\lambda_{1}=1, \lambda_{2}=3 / 4$, $\lambda_{3}=13 / 18, \lambda_{4}=67 / 96$, etc.) It is easily shown that the sequence $\left\{\lambda_{N}\right\}$ is monotonically decreasing, and hence a limit $\lambda$ exists. Computation has shown $\lambda=.62432965 \cdots$, but nothing is known of the relationship of $\lambda$ to other constants. What can be proved about the irrationality or transcendence of $\lambda$, and its relationship to classical mathematical constants? (Some nearby values unequal to $\lambda$ include $5 / 8,1-e^{-1},\left(5^{1 / 2}-1\right) / 2$, and $\pi / 5$.) (Received June 8, 1964.)

## ERRATA

Robert R. Korfhage: Correction to 'On a sequence of prime numbers.'
It has been brought to my attention that because of the lack of an overflow check in the programming system used the factors listed for $n=7$ are in error. Thus the value of $P_{8}$ is also wrong. Present knowledge indicates that probably $P_{9}>P_{8}$, and thus Mullin's problem is still open. (Received July 16, 1964.)

