Last time we revisited the seating chart example, and asked: what is the probability that $\mathbf{5}$ or more students sit in their assigned seat?

Bounds/approximations:
$\begin{aligned} \leq 20 \% & \text { (Markov's inequality) } \\ \leq 6.25 \% & \text { (Chebyshev's inequality) } \\ 0.36598 \ldots \% & \text { (exact answer - The Truth) } \\ 0.36598 \ldots \% & \text { (Poisson Approximation - accurate to } 258 \text { decimal places!!) }\end{aligned}$

See emailed note for details!

