

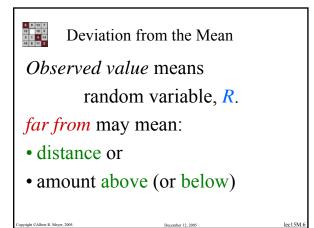
Jacob D. Bernoulli (1659 – 1705) Even the stupidest man----by some instinct of nature *per se* and by no previous instruction (this is truly amazing) -- knows for sure that the more observations ...that are taken, the less the danger will be of straying from the mark. ---Ars Conjectandi (The Art of Guessing), 1713*

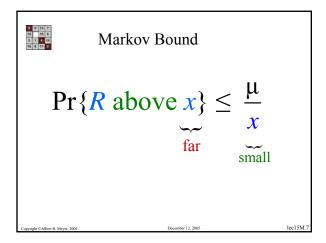


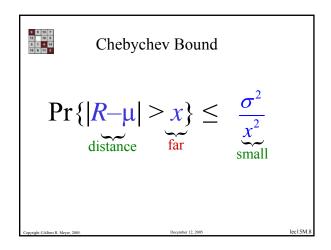
Jacob D. Bernoulli (1659 – 1705)

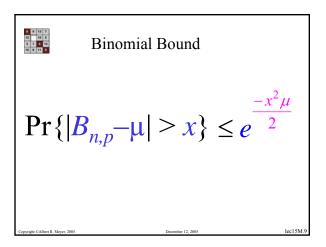
It certainly remains to be inquired whether after the number of observations has been increased, the probability...of obtaining the true ratio...finally exceeds any given degree of certainty; or whether the problem has, so to speak, its own asymptote----that is, whether some degree of certainty is given which one can never exceed.

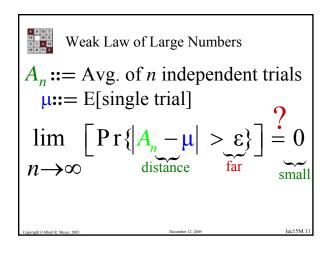
Deviation from the Mean Pr {observed value far from expected value} is SMALL How small?











Jacob D. Bernoulli (1659 – 1705)

Therefore, this is the problem which I now set forth and make known after I have pondered over it for twenty years. Both its novelty and its very great usefulness, coupled with its just as great difficulty, can exceed in weight and value all the remaining chapters of this thesis.

The Principle Behind:

 8
 93
 7

 12
 90
 8

 3
 1
 4
 54

 15
 8
 11
 2

- Estimation (polling)
- Algorithm analysis
- Design against failure
- Communication thru noise
- Gambling



Not Usable as Stated

Need to know the rate of convergence to 0 for any application.

