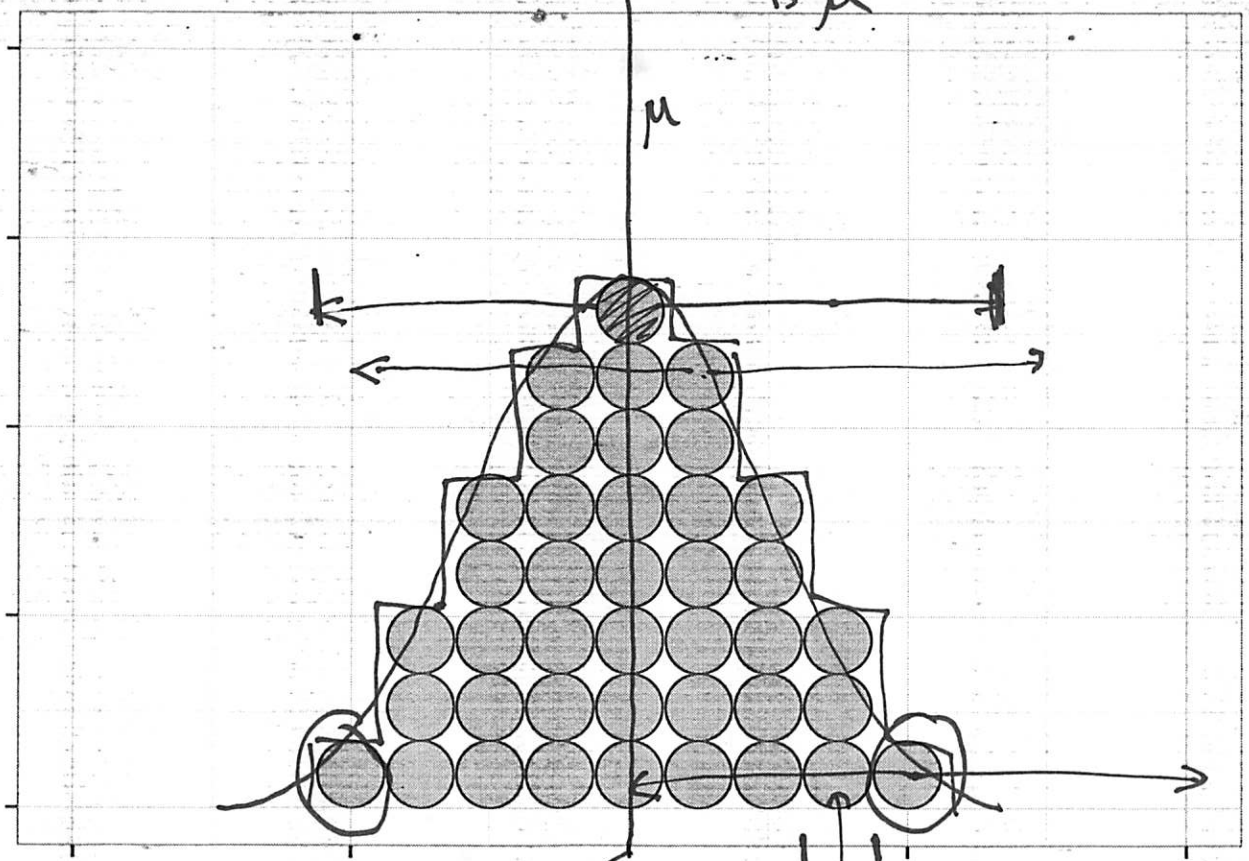


Sampling Dist of \bar{X}

sd. of this dist = $\frac{\sigma}{\sqrt{n}}$

mean of this dist
is μ

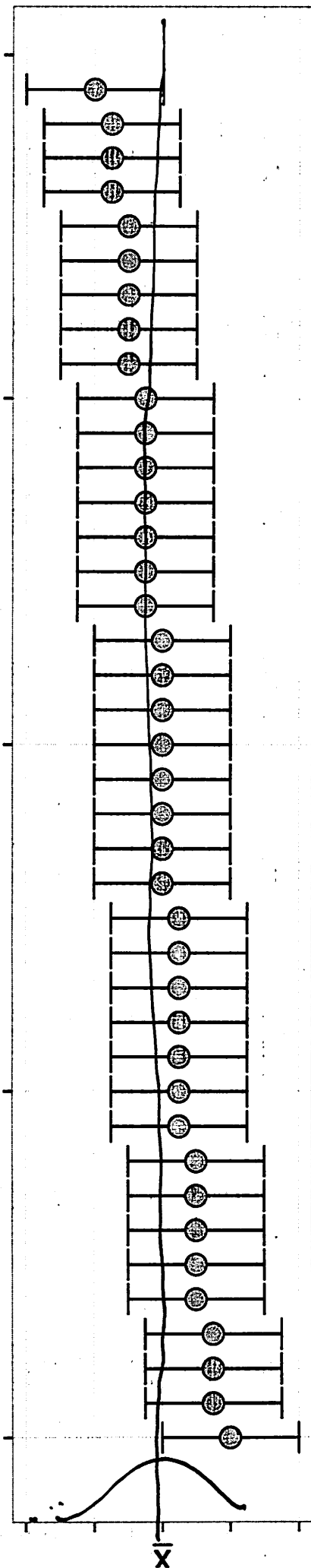


likely interval for μ

$$\bar{X} \pm 2 \frac{\sigma}{\sqrt{n}}$$

\bar{x}
↓
 μ

each dot represents a sample
this dot is a sample with a sample average, \bar{X}_i , in this interval



40 sample avg, \bar{X} ,
 2 σ intervals,
 don't cover
 the true
 mean, μ

$$2/40 \approx 5\%$$