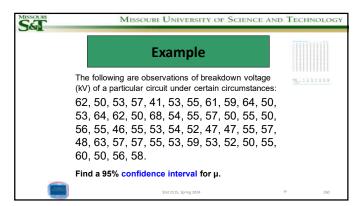


258 259



Example

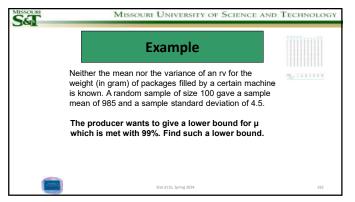
The data of a random sample of size 100 from a population with known variance σ²=20 yield a sample mean of 101.5.

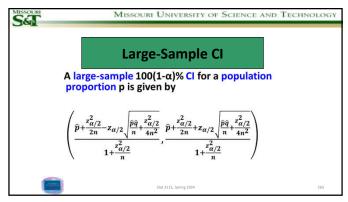
(a) Find a 95% confidence interval for μ.

(b) How large should n be so that the 99% CI for μ has length at most 0.1?

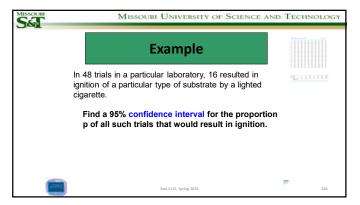
(c) Find a one-sided 95% CI for μ.

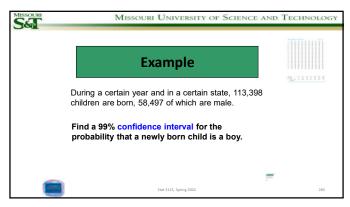
260 261





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