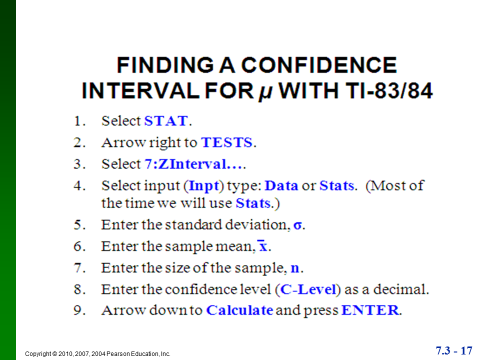
Summary for Section 7.3 ( is known)

|  |  |  |
| --- | --- | --- |
| CLT for | C.I. = Confidence Interval | Sample size n |
| n > 30  Or  The population distribution is bell shaped to start with.  The C.L.T. for says:  The sampling distribution for will be bell shaped with:  =  =  = the standard deviation of s.  = the standard error of the mean. | = Best Estimate  Best Estimate =  Error =  So  Example:  = 180 5  Best Estimate = = 180  Error = 5  C.I. is  C.I. is [L , U] | You need a C.I. with high confidence (which means a specified level of confidence) and a small error (which means a specified E).  So the question boils down to:  How big the sample size should be to guarantee a high specified confidence and a small specified error.  n =  When computing the sample size n, you always round up. |



Summary for Section 7.3 ( is unknown)

|  |  |  |
| --- | --- | --- |
| CLT for | C.I. = Confidence Interval | Sample size n |
| n > 30  Or  The population distribution is bell shaped to start with.  The C.L.T. for says:  The sampling distribution for will be bell shaped with:  =  =  = the standard deviation of s.  = the standard error of the mean.  S = Standard deviation of the sample.  = Average of the sample. | = Best Estimate  Best Estimate =  Error =  So  t stands for the student t distribution in reference to the Statistician William Sealy Gosset.  The can be found from the TI or read from a table.  Example:  = 180 5  Best Estimate = = 180  Error = 5  C.I. is  C.I. is [L , U] | You will not have problems to compute the sample size needed when  is unknown |

