Chapter 6
Confidence Intervals

6.1
Confidence Intervals for the Mean

Estimating Population Parameters

* You can use _____ to estimate the value of an _____ _____.
* Point estimate – a _____ estimate for a population parameter.
  * The sample _____ is a point estimate of the population _____.
  * Remember from Chapter 5 – they are _____

EX:

* An economics researcher is collecting data about grocery store employees in a county. The data listed represents a random sample of the number of hours worked by 20 employees from several grocery stores in the county. Find a point estimate of the population mean μ.

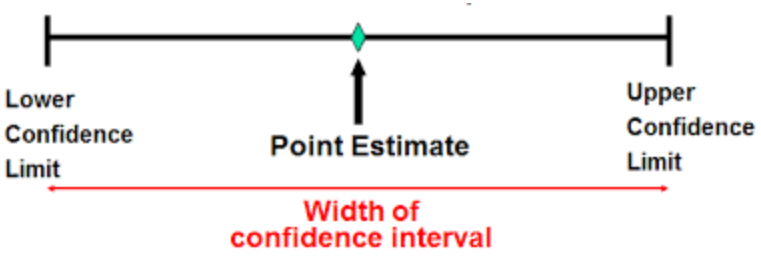
30	27	37	33	23	35	40	23	31	33
44	39	29	26	22	30	39	41	38	39

Interval Estimates

* In the previous example, it is _____ that the population mean _____ _____ the sample mean.
* So instead of using a _____, you can use an _____.
  * You can _____ that the _____ lies in an _____.

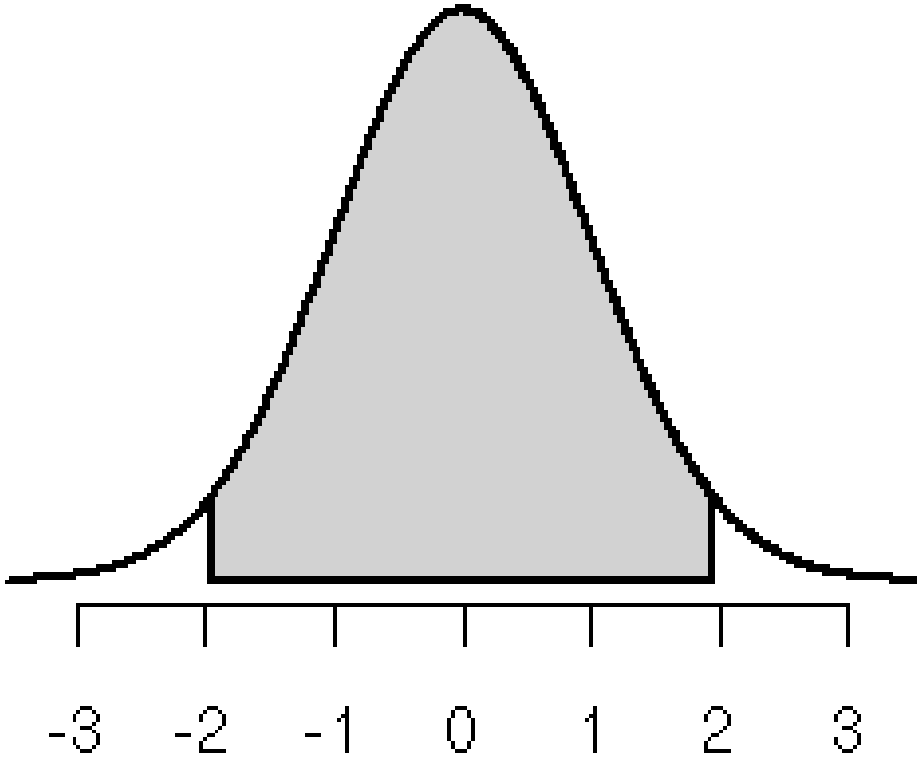
Interval Estimate

* An _____, or _____ _____, used to estimate a _____.
* To form an interval estimate:
* Use the _____ as the _____ of the interval.
* Then _____ and _____ the _____ to it.



Level of Confidence (c)

* The _____ that the _____ _____ contains the _____.
* The _____ under the standard normal curve between the _____, _____.
  * Critical Values – separate sample statistics that are _____ from sample statistics that are _____


-3
-2
-1
0
1
2
3

EX: