

## Extra Homework & Review for Exam # 3 Continue

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- 1) Use the t-table to find the critical value for a confidence level of 99% and a sample size of 4.
- 2) Use the t-table to find the critical value for a confidence level of 95% and a sample size of 18.
- 3) How many calories are there in 3 ounces of French fries? It depends on where you get them from. Good Cholesterol Bad Cholesterol, by Roth and Streicher, gives the data from eight popular fast-food restaurants. The data are (in calories)  
222 255 254 230 249 222 237 287  
Use these data to create a 99% confidence interval for the mean calorie count in 3 ounces of French fries obtained from fast-food restaurants.
- 4) Based on data obtained from *State Health Care Data*, in a random sample of 15 hospitals the mean amount of days patients stay in hospitals is 7.3 days with a standard deviation,  $s = 0.8$  days. Find the 99% confidence interval for the population average number of days patients stay in the hospital.  
Repeat the same procedure for a 90% confidence interval.
- 5) A random sample of 8 credit cards reveals that the mean average tips of a famous waiter is \$12.35 with a standard deviation of \$2.25. Construct the 95% confidence interval for the population Use the t- mean of tips received by the famous waiter.
- 6) According to *Consumer Report*, the life of 16 size AA batteries in toys has a sample mean of 3.58 hours and a sample standard deviation of 1.85 hours. Find a 95% confidence interval for the mean life for all AA batteries used in toys.
- 7) Repeat the same procedure for a 90% confidence interval