Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 7 Stat Crunch Assignment**

**Calculate confidence intervals for each population proportion:**

1. From a KRC Research poll in which respondents were asked if they felt vulnerable to identity theft: who said “yes”.

Find the 95% confidence interval:

0.499<p<0.561

Copy and paste Stat Crunch Display:

**95% confidence interval results:**

| **Proportion** | **Count** | **Total** | **Sample Prop.** | **Std. Err.** | **L. Limit** | **U. Limit** |
| --- | --- | --- | --- | --- | --- | --- |
| p | 531 | 1002 | 0.52994012 | 0.015767256 | 0.49903686 | 0.56084337 |

1. From a 3M Privacy Filters poll in which respondents were asked to identify their favorite seat when they fly: , who chose the window seat.

Find the 99% confidence interval:

0.482<p<0.546

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**95% confidence interval results:**

| **Proportion** | **Count** | **Total** | **Sample Prop.** | **Std. Err.** | **L. Limit** | **U. Limit** |
| --- | --- | --- | --- | --- | --- | --- |
| p | 479 | 932 | 0.5139485 | 0.01637167 | 0.48186061 | 0.54603638 |

**Calculate confidence intervals for each population mean**

1. Construct a confidence interval estimate of the population mean . , , .

Find the 95% confidence interval: 78.21< <79,79

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**95% confidence interval results:**

| **Mean** | **Sample Mean** | **Std. Err.** | **DF** | **L. Limit** | **U. Limit** |
| --- | --- | --- | --- | --- | --- |
| μ | 79 | 0.40249224 | 499 | 78.209212 | 79.79078 |

1. Construct a confidence interval estimate of the population mean µ. , , s = 12.

Find the 90% confidence interval:

5.32< µ<1 2.5

1. Refer to the weights of pre-1964 quarters and weights of post-1964 quarters listed in Data Set Coin Weights.
   1. Construct a 95% confidence interval of the mean weight of pre-1964 quarters.

6.16 < µ< 6.22

* 1. Construct a 95% confidence interval of the mean weight of post-1964 quarters.

5.62< µ<5.66

* 1. Compare the preceding results. Can we conclude that the population means for pre-and post-1964 quarters are different? Use your confidence intervals to explain your answer.

Yes, we can conclude that the populations means are diff based of the confidence intervals of 95% derived from the sample mean.