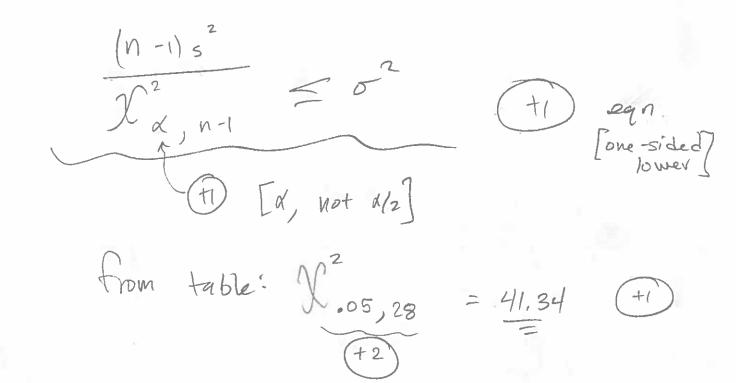
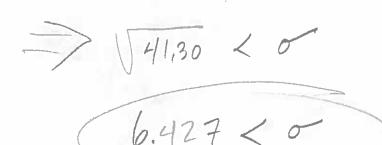


1) A process engineer is investigating the variability in tannin content of a specific craft beer using spectrophotometric techniques. (Note: tannins are chemical compounds in the polyphenol family found in a variety of foods and beverages; in beer, too much leads to astringency and can also make you feel like you want to spew.) A sample of 29 beers yielded a sample mean of 82.68 µg/mL and a sample standard deviation of 7.809 µg/mL. Write a 95% lower confidence bound on the population standard deviation of tannin content. Include a unit with your answer.



$$\frac{28.7.809^{2}}{41.34}$$
 < 0^{2}





2) A sample of 29 beers tested for tannin content yielded a sample mean of 82.68 μ g/mL and a sample standard deviation of 7.809 μ g/mL. No population parameters are known. Write a 95% confidence interval on mean tannin content, and include a unit with your answer.

$$000$$
 U: $82,68 \pm 2,048 = \frac{7.809}{\sqrt{29}}$