## Quiz 9: Confidence Intervals

Name:

We collect data on 100 bottles of lotion, discovering that the mean quantity of lotion in a bottle is 16.3 ounces. The standard deviation of the quantity of lotion is known to be .5 ounces.

1. Give a 95% confidence interval for  $\mu$ .

2. What would happen to the  $\underline{\text{size}}$  of the confidence interval if we desired a 99% confidence level? Explain why this happens.