A simple random sample of 8 employees is selected from a large firm. For the 8 employees, the number of days each was absent during the past month was found to be

1, 3, 3, 3, 1, 5, 4, and 3

**(a)** What is the point estimate for, the mean number of days absent for the firm's employees? Round your answer to nearest hundredth.



= 



**(b)** What is the point estimate for, the variance of the number of days absent? Round your answer to nearest hundredth.



= 



Determine the limits of the 90% confidence interval for , given that



*n* = 86; = 60; and = 10.



95% CI = (n1,n2) where n1=lower limit and n2=upper limit

There are 300 students enrolled in Business Statistics. Historically, exam scores are normally distributed with a standard deviation of 21.25. Your instructor randomly selected a sample of 30 examinations and finds a mean of 67.2. Determine a 90% confidence interval for the mean score for all students taking the course.

90% CI = to 