## QUESTIONS TO HAND IN - EXPERIMENT 1

NAME
LAB INSTRUCTOR LAB DAY/TIME $\qquad$

Given the data set of 20 points:
$5,7,2,15,21,13,24,10,2,19,14,8,3,5,17,23,21,25,7,10$

1. What is the mean value, $\bar{X}$ ?
2. What is the variance of the distribution?
3. What is the standard deviation, $s$, of the distribution?
4. What is the standard deviation of the mean, $s_{m}$ ?
5. Assuming that the standard deviation of the mean, $s_{m}$, gives a good approximation to $\sigma$ for the mean, what are the plus-or-minus limits on the mean for $95 \%$ confidence in the result?
