

# Lab Report: Confidence Intervals – Single Population Mean

Name(s):

## Key Terms

Provide the definitions for the following terms:

- **inferential statistics:**
- **point estimate:**
- **confidence interval:**
- **Empirical Rule:**
- **margin of error:**
- **error bound for a population mean:**
- **confidence level:**
- **alpha (significance):**
- **Student's t distribution:**
- **degrees of freedom:**

## Mean and standard deviation

### Confidence Intervals—Known Population Deviation

### Confidence Intervals—Unknown Population Deviation

## Discussion

1. Number and percentage of CIs containing the actual population mean:

$\mu$ assumed	Number of CIs containing $\mu$	% of CIs containing $\mu$
Known		
Unknown		

- 2.
- 3.
- 4.