

Your Name: \_\_\_\_\_

Names of people you worked with: \_\_\_\_\_

**Task:** Assume we have two very small **samples:**  $(y_{11} = 3, y_{12} = 9, y_{21} = 5, y_{22} = 1, y_{23} = 9)$ . Find  $\hat{\mu}_1, \hat{\mu}_2, \hat{\epsilon}_{11}, \hat{\epsilon}_{12}, \hat{\epsilon}_{21}, \hat{\epsilon}_{22}, \hat{\epsilon}_{23}, n_1, n_2$ .

**Solution:**

$$\begin{aligned}\hat{\mu}_1 &= 6 \\ \hat{\mu}_2 &= 5 \\ \hat{\epsilon}_{11} &= -3 \\ \hat{\epsilon}_{12} &= +3 \\ \hat{\epsilon}_{21} &= 0 \\ \hat{\epsilon}_{22} &= -4 \\ \hat{\epsilon}_{23} &= +4 \\ n_1 &= 2 \\ n_2 &= 3\end{aligned}$$