Hand Calculations for HW 5 Problem 2.c

Since we are only interested in one variable, the difference in means between the left and right widths, all of the interval calculations will produce the same results. Therefore, we will consider the hand calculation of the individual interval.

\[ \bar{X}_{\text{diff}} = 0.223 \quad t_{0.025,99} = 1.984 \quad S^2 = 0.087 \quad n = 100 \]

\[ 0.223 \pm (1.984) \sqrt{\frac{0.087}{100}} = (0.164 < \mu_{\text{diff}} < 0.282) \]