

Section 8.6 — Example

Problem: (Exercise 8.47) The means and standard deviations from each of the computer databases of each of the three hotel chains - Marriott, Radisson, Wyndham - are given below:

	Mariott	Radisson	Wyndham
Sample Average	\$170	\$145	\$160
Sample Standard Deviation	17.5	10	16.5

1. Find a 95% confidence interval for the difference in the average room rates for the Marriott and the Wyndham hotel chains.
2. Find a 99% confidence interval for the difference in the average room rates for the Radisson and the Wyndham hotel chains.
3. Do the intervals above contain the value $(\mu_1 - \mu_2) = 0$? Why is this of interest to the researcher?
4. Do the data indicate a difference in the average room rates between the Marriott and the Wyndham chains? Between the Radisson and the Wyndham chains?