Discussion

1. Problem 9.5, page 227. In addition to parts (a)-(e) construct a one-sided 95% confidence interval — lower bound — for $\mu_d$.

2. Problem 9.8, page 228. In addition to parts (a)-(d), construct one-sided 90% confidence intervals — upper bound — for $\mu_1$ and $\mu_2$.

3. (Ott and Longnecker) A corporation maintains a large fleet of company cars for its salespeople. To check the average number of miles driven per car per month, a random sample of $n = 40$ cars is examined. The mean and the standard deviation for the sample are 2,752 miles and 350 miles, respectively. Records for previous years indicate that the average number of miles driven per car per month was 2,600. Use the sample data to test the research hypothesis that the current mean $\mu$ differs from 2,600. Set $\alpha = 0.05$. 