

Independent per acre market value estimates of a 4 acre vacant industrial tract of land located in Dallas County, Texas. Group 1 is composed of certified appraisers. Group 2 is composed of appraisers who are both certified and designated.

Date of appraisal: September 13, 2002

Observation	Appraised Value	
	Group 1	Group 2
1	\$85,000	\$85,000
2	\$85,000	\$80,000
3	\$78,000	\$85,000
4	\$85,000	\$78,500
5	\$85,000	\$82,000
6	\$84,000	\$85,000
7	\$85,000	\$85,000
8	\$85,000	\$85,000
9	\$80,000	\$82,000
10	\$85,000	\$82,000
11	\$85,000	\$85,000
12	\$85,000	\$85,500
13	\$85,000	\$85,000
14	\$81,250	\$82,000
15	\$85,000	\$82,500
Sample mean	\$83,883.33	\$83,300
Sample standard deviation	\$ 2,241.78	\$ 2,177.81

Assignments

1. Construct a confidence interval of approximately 90% on the population mean for the certified group. Assume population normality and unknown population standard deviation.
2. Construct a confidence interval of approximately 90% on the population mean for the certified group. Assume unknown population functional form and unknown population standard deviation.
3. Construct a confidence (prediction) interval of approximately 90% on the next observation for the group of appraisers who are both certified and designated. Assume population normality and unknown population standard deviation.
4. Construct a confidence (prediction) interval of approximately 90% on the next observation for the group of appraisers who are both certified and designated. Assume unknown population functional form and unknown population standard deviation.
5. Construct an 88% confidence interval on η for designated and certified group.