Lesson 10.4 Practice: Estimating a Population Mean

School Launch · Statistics · Unit 10: Confidence Intervals · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A sample of 20 has $\bar{x} = 25.1$ and $s = 2.0$. Construct a 95% t-interval for μ (two decimals). EASY

2. A sample of 36 has $\bar{x} = 74.6$ and $s = 9.7$. Construct a 95% t-interval for μ (two decimals). EASY

3. A sample of 17 has $\bar{x} = 58.1$ and $s = 4.4$. Construct a 95% t-interval for μ (two decimals). EASY

4. A sample of 22 has $\bar{x} = 72.3$ and $s = 3.6$. Construct a 95% t-interval for μ (two decimals). MEDIUM

5. A sample of 23 has $\bar{x} = 42.2$ and $s = 7.0$. Construct a 95% t-interval for μ (two decimals). MEDIUM

6. A sample of 25 has $\bar{x} = 66.6$ and $s = 9.7$. Construct a 95% t-interval for μ (two decimals). MEDIUM

7. A sample of 34 has $\bar{x} = 56.8$ and $s = 3.0$. Construct a 95% t-interval for μ (two decimals). MEDIUM

8. A sample of 24 has $\bar{x} = 52.4$ and $s = 4.6$. Construct a 95% t-interval for μ (two decimals). HARD

9. A sample of 35 has $\bar{x} = 41.8$ and $s = 4.4$. Construct a 95% t-interval for μ (two decimals). HARD

10. A sample of 26 has $\bar{x} = 35.4$ and $s = 3.9$. Construct a 95% t-interval for μ (two decimals). HARD