Lesson 3.6 Practice: Assessing Normality

School Launch · Statistics · Unit 3: Position and the Normal Distribution · 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. In a sample of 20 values with mean 74 and SD 7, 13 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? EASY

2. In a sample of 20 values with mean 62 and SD 7, 14 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? EASY

3. In a sample of 20 values with mean 57 and SD 11, 12 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? EASY

4. In a sample of 20 values with mean 74 and SD 10, 14 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? MEDIUM

5. In a sample of 20 values with mean 79 and SD 7, 13 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? MEDIUM

6. In a sample of 20 values with mean 77 and SD 5, 11 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? MEDIUM

7. In a sample of 20 values with mean 41 and SD 8, 11 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? MEDIUM

8. In a sample of 20 values with mean 58 and SD 10, 17 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? HARD

9. In a sample of 20 values with mean 46 and SD 10, 17 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? HARD

10. In a sample of 20 values with mean 65 and SD 11, 11 fall within one SD of the mean. What percent is that, and how does it compare with the 68% expected for normal data? HARD