Lesson 3.1 Practice: Percentiles and z-Scores

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. A test has mean 56 and SD 10. Find the z-score of 46 (nearest hundredth). EASY

2. A test has mean 91 and SD 14. Find the z-score of 117 (nearest hundredth). EASY

3. A test has mean 75 and SD 12. Find the z-score of 100 (nearest hundredth). EASY

4. A test has mean 89 and SD 15. Find the z-score of 122 (nearest hundredth). MEDIUM

5. A test has mean 97 and SD 14. Find the z-score of 56 (nearest hundredth). MEDIUM

6. A test has mean 92 and SD 13. Find the z-score of 58 (nearest hundredth). MEDIUM

7. A test has mean 62 and SD 14. Find the z-score of 96 (nearest hundredth). MEDIUM

8. A test has mean 90 and SD 12. What score has $z = 0.93$ (nearest tenth)? HARD

9. A test has mean 74 and SD 12. What score has $z = 0.42$ (nearest tenth)? HARD

10. A test has mean 61 and SD 11. What score has $z = 1.92$ (nearest tenth)? HARD