Lesson 3.3 Practice: Normal Distributions and the 68–95–99.7 Rule

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. Heights are approximately normal with mean 76 and SD 12. About what percent fall between 40 and 112? EASY

2. Heights are approximately normal with mean 62 and SD 12. About what percent fall between 38 and 86? EASY

3. Heights are approximately normal with mean 70 and SD 7. About what percent fall between 63 and 77? EASY

4. Scores are approximately normal, mean 75, SD 6. About what percent score above 87? MEDIUM

5. Scores are approximately normal, mean 64, SD 12. About what percent score above 76? MEDIUM

6. Scores are approximately normal, mean 85, SD 10. About what percent score above 95? MEDIUM

7. Scores are approximately normal, mean 76, SD 6. About what percent score above 88? MEDIUM

8. Scores are approximately normal, mean 53, SD 3. About what percent score above 62? HARD

9. Scores are approximately normal, mean 67, SD 7. About what percent score above 74? HARD

10. Scores are approximately normal, mean 74, SD 4. About what percent score above 82? HARD