Lesson 3.4 Practice: Finding Normal Proportions

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. $X \sim N(84, 3)$. Find $P(X < 81)$ (four decimals). EASY

2. $X \sim N(93, 9)$. Find $P(X < 81.3)$ (four decimals). EASY

3. $X \sim N(88, 7)$. Find $P(X < 75.4)$ (four decimals). EASY

4. $X \sim N(70, 15)$. Find $P(58 < X < 79)$ (four decimals). MEDIUM

5. $X \sim N(50, 6)$. Find $P(40.4 < X < 46.4)$ (four decimals). MEDIUM

6. $X \sim N(84, 12)$. Find $P(86.4 < X < 93.6)$ (four decimals). MEDIUM

7. $X \sim N(97, 15)$. Find $P(80.5 < X < 101.5)$ (four decimals). MEDIUM

8. $X \sim N(90, 4)$. Find $P(86.4 < X < 88.8)$ (four decimals). HARD

9. $X \sim N(77, 5)$. Find $P(81.5 < X < 85)$ (four decimals). HARD

10. $X \sim N(86, 5)$. Find $P(77.5 < X < 84)$ (four decimals). HARD