Lesson 8.2 Practice: Binomial Mean, Standard Deviation and Cumulative Probabilities

School Launch · Statistics · Unit 8: Binomial and Geometric Distributions · 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. $X \sim B(41, 0.3)$. Find the mean and SD (nearest hundredth). EASY

2. $X \sim B(34, 0.2)$. Find the mean and SD (nearest hundredth). EASY

3. $X \sim B(20, 0.8)$. Find the mean and SD (nearest hundredth). EASY

4. $X \sim B(55, 0.9)$. Find the mean and SD (nearest hundredth). MEDIUM

5. $X \sim B(52, 0.7)$. Find the mean and SD (nearest hundredth). MEDIUM

6. $X \sim B(59, 0.8)$. Find the mean and SD (nearest hundredth). MEDIUM

7. $X \sim B(35, 0.1)$. Find the mean and SD (nearest hundredth). MEDIUM

8. $X \sim B(58, 0.7)$. Find the mean and SD (nearest hundredth), and $P(X \le 40)$ (four decimals). HARD

9. $X \sim B(52, 0.5)$. Find the mean and SD (nearest hundredth), and $P(X \le 31)$ (four decimals). HARD

10. $X \sim B(57, 0.1)$. Find the mean and SD (nearest hundredth), and $P(X \le 6)$ (four decimals). HARD