Lesson 8.4 Practice: Geometric Distributions

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. Each attempt succeeds with probability 0.5. Find the probability the first success is on attempt 6 (four decimals), and the expected number of attempts. EASY

2. Each attempt succeeds with probability 0.4. Find the probability the first success is on attempt 1 (four decimals), and the expected number of attempts. EASY

3. Each attempt succeeds with probability 0.4. Find the probability the first success is on attempt 6 (four decimals), and the expected number of attempts. EASY

4. Each attempt succeeds with probability 0.5. Find the probability the first success is on attempt 3 (four decimals), and the expected number of attempts. MEDIUM

5. Each attempt succeeds with probability 0.3. Find the probability the first success is on attempt 2 (four decimals), and the expected number of attempts. MEDIUM

6. Each attempt succeeds with probability 0.5. Find the probability the first success is on attempt 4 (four decimals), and the expected number of attempts. MEDIUM

7. Each attempt succeeds with probability 0.3. Find the probability the first success is on attempt 5 (four decimals), and the expected number of attempts. MEDIUM

8. Each attempt succeeds with probability 0.4. Find the probability the first success is on attempt 2 (four decimals), and the expected number of attempts. HARD

9. Each attempt succeeds with probability 0.2. Find the probability the first success is on attempt 2 (four decimals), and the expected number of attempts. HARD

10. Each attempt succeeds with probability 0.1. Find the probability the first success is on attempt 6 (four decimals), and the expected number of attempts. HARD