

Statistics – OR 155, Section 1, Homework # 4

Due: Thursday, February 12, 2007

C 12: A factory makes 10% defective items & items are independently defective. Find  $P\{9 \text{ or more good items in } 10\}$ :

- Using  $X = \# \text{ good items}$ , and Binomial probability distribution function. (0.736)
- Using  $X = \# \text{ bad items}$ , and Binomial probability distribution function. (0.736)

5.13,            5.14 (Bi(15,0.5), 0.5)            5.25 (b),            5.27 (b)

Rework, using the Binomial Distribution:

4.36            C12 (a)

HW C13: For each of the following, formulate quantitative  $H_0$  and  $H_1$ :

- We now buy sheet metal from A & 90% of the time it meets our specs. B claims more of their sheet metal meets our specs.  
(let  $p = \% \text{ from B meeting specs}$ ,  $H_0: p \leq 0.9$      $H_1: p > 0.9$ )
- Test the claim that on average girls score differently from boys on achievement tests.
- Test the claim that on average girls score better than boys on achievement tests.
- Test a claim that 70% of consumers prefer Brand A.
- Test a claim that at least 70% of consumers prefer Brand A.