

MTH 357/657

Quiz #3

1. Crates of eggs are inspected for cracks by randomly removing three eggs in succession and examining their contents. If all three eggs are good the crate is shipped; otherwise it is rejected. What is the probability that a crate will not be shipped if it contains 120 eggs, of which 10 are cracked. You can leave your answer as a sum and product of fractions.

$$1 - \frac{110}{120} \cdot \frac{109}{119} \cdot \frac{108}{118} = .2315$$