Answer on Question #79132 — Math — Statistics and Probability

Question

If 3% of the fruits brought into the market are over ripe, find the probability that 5 are over ripe in a sample of 100 fruits.

Solution

p = 0.03

k= 5

n = 100

$P(k, n) = \dfrac{\lambda^k e^{-\lambda}}{k!}$, where λ=np (Poisson formula).

$P(k, n) = \dfrac{3^5}{e^3 * 2 * 3 * 4 * 5} = 0.1$

Answer: 0.1.