

Probability and Statistics (MATH 1530-017)

Attendance Quiz, March 31, 2009

NAME _____ E-NUMBER _____

Pick the letter of the best answer. The problems are worth 2 points each.

1. Joe reads that 1 out of 4 eggs contain salmonella bacteria. So he never uses more than 3 eggs in cooking. If eggs do or don't contain salmonella independently of each other, the number of contaminated eggs when Joe uses 3 chose at random has the distribution
 - (a) normal $N(0.75, 0.25)$.
 - (b) binomial with $n = 4$ and $p = 1/4$.
 - (c) binomial with $n = 3$ and $p = 1/4$.
 - (d) binomial with $n = 3$ and $p = 1/3$.
2. In the previous exercise, the probability that at least one of Joe's 3 eggs contains salmonella is about
 - (a) 0.68
 - (b) 0.58
 - (c) 0.30
 - (d) 0.42