Exercise 2 Discrete and Continuous Probability Distributions Worksheet **(hand calculations)**

1. Historical data indicates that 10% of all bits transmitted through a digital transmission channel are received in error. Let *X* be the number of bits in error in the next 4 bits transmitted. Assume that the transmission trials are independent.

What is the probability that at most 2 of the 4 bits are in error?

Numerical answer



Set up problem using values in problem statement



You may want to use your calculator or Excel or Minitab to check your calculations, but I need to see the full binomial equation set up with values from the problem statement for full credit.

Thank you.

Dr. Burtner