Name: _____ MDM 4U1 Date: _____

Unit 4: Probability Distributions

Unit Topics

Section	**Issues** *Ways the course connects to the world around me…*	**Concepts** *Things I need to be able to explain are…*	**Skills** *Things I need to practice are…*
4.1 Probability Distributions	A. Are the digits of pi random? B. How is a quincrux an example of a Bernoulli Trial?	A. What is the difference between a discrete random variable and a continuous random variable? Give examples of each. B. What is a Bernoulli trial? Give examples.	A. Calculate p and (1-p) for simple Bernoulli Trials B. Calculate the expected value for a probability experiment C. Identify a continuous probability distribution from a discrete probability distribution
4.2 Binomial Distributions (5.3 in text)		A. What is the random variable X represent in a binomial distribution? B. When can binomial distributions be used?	A. Calculate probabilities for situations involving binomial distributions (both directly and indirectly) B. Calculate the expected value for a binomial distribution
4.3 Geometric Distributions		A. What is the random variable X represent in a geometric distribution? B. When can geometric distributions be used?	A. Calculate probabilities for situations involving geometric distributions (both directly and indirectly) B. Calculate the expected value (waiting time) for a geometric distribution
4.4 Hypergeometric Distributions		A. What is the random variable X represent in a hypergeometric distribution? B. When can hypergeometric distributions be used?	A. Calculate probabilities for situations involving hypergeometric distributions (both directly and indirectly) B. Calculate the expected value for a hypergeometric distribution

Note: Test will be on Units 3 AND 4. Make sure to go back and make any corrections on your Unit 3 Quiz.

See attached sheet for Unit 4 review questions: