

Module 5E Questions:

1. Which of the follow statements about distributions is not true?
 - a. The normal distribution can be used as an approximation to the binomial distribution
 - b. The Poisson distribution is used under conditions where n approaches 0 while p approaches infinity
 - c. The binomial distribution expresses the probability of getting X successes out of n trials
 - d. As degrees of freedom increase, the χ^2 distribution approaches a normal distribution
2. Singleton babies born have a mean weight of 3.339 kg and a standard deviation of 0.573 kg.
 - a. What is the probability a newborn weighs more than 5 kg?
 - b. What is the probability a newborn weighs between 3 kg and 4 kg?
 - c. What fraction of newborns will be > 1.5 sd from the mean?
 - d. What fraction of newborns will be > 1.5 kg from the mean?
 - e. A random sample of 10 newborns is taken, what is the probability that their mean weight would be > 3.5 kg?