

True/False - No explanation needed. (For each: 1 point if correct, 0 points if not answered, -1 points if incorrect)

1. Sampling without replacement begins to look like sampling with replacement as N increases the population size and as n increases the probability of being sampled. True/False
2. I have 10 red ties and one blue tie. I randomly choose ties until I pick the blue tie. If X is the random variable signifying the number of red ties picked, then X is geometric. True/False

Problems - Needs justification.

1. What is the expected number of Jacks in a five card hand? Assume a normal 52 card deck. (10 points)