

Rosalyn Bathrick

Reading Qs 5

I did not work with any other students

Q1 (a)*event* to the (b)*probability*.

Q2 There are four possible outcomes: H-H, T-H, H-T, T-T

Q3 There are three possible outcomes if you are just interested in the number of heads and tails.

Q4 There are six outcomes, or 3!

Q5 These are permutations – order matters

Q6 There are four possible events.

Q7 These are combinations – order doesn't matter.

Q8 The sample space is six

Q9 Given the order doesn't matter, there are three ways to collect two acorns of the same spp.

Q10 Given the order doesn't matter, there are three ways to collect two acorns of different spp.

Q11 The probability is $1/3 = 33.33\%$

Q12 The probability is $1/3 = 33.33\%$

Q13 The probability is $1/3 = 33\%$

Q14 The probability is $1/9 = 11\%$

Q15 The probability is $2/9 = 22\%$

Q16 The probability is $1/9 = 11\%$

Q17 ∞

Q18 11

Q19 Both the Binomial and Poisson distributions both have a sample space of events, whether a discrete number or infinite, that make them good models for counts.

Q20 the event of a bird survey looking for presence/absence of species, a Binomial distribution would be more useful – there are a set number of sites (n), and a probability of seeing each spp. at those sites (p), but the individuals are not being counted.